ENVIRONMENTAL IMPACT EVALUATION

Prepared in accordance with the
Connecticut Environmental Policy Act

Proposed Public Health Laboratory

Rocky Hill, Connecticut

JUNE 6, 2006

Sponsoring Agency
State of Connecticut
Department of Public Health

Participating Agency
State of Connecticut
Department of Public Works

DPW Project No. BI-2B-179
DPW Contract No. OC-DPW-EPA-005-Task #1

Prepared by:
Fitzgerald & Halliday, Inc.

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH
DIVISION OF LABORATORY SERVICES

June 6, 2006

Re: Environmental Impact Evaluation for the Proposed State Public Health Laboratory (SPHL), Rocky Hill, Connecticut
DPW Project BI-2B-179

Dear Reviewer:

The Connecticut Department of Public Health (DPH), in association with the Connecticut Department of Public Works (DPW), submits for your review and comment the enclosed copy(ies) of the Environmental Impact Evaluation (EIE) that was prepared pursuant to the Connecticut Environmental Policy Act for the above-referenced project.

A public hearing is scheduled to solicit public comments on the EIE. The hearing is July 12, 2006, at 7:00 pm at the Rocky Hill Town Hall, Council Chambers, 761 Old Main Street, Rocky Hill. Doors open at 6:30 pm. The hearing will conclude at the end of public comments.

Written comments on this EIE and any other pertinent information must be sent or postmarked by **July 21, 2006**. Comments must be sent to my attention at:

Elise Gaulin-Kremer, Ph.D.
Public Health Administrator
Department of Public Health
10 Clinton Street
P.O. Box 1689
Hartford, Connecticut 06144
Fax: (860) 509-8697
E-Mail: elise.kremer@po.state.ct.us

Thank you for your time and consideration.

Sincerely,

Elise Kremer / JB

Elise Gaulin-Kremer, Ph.D.
Public Health Administrator
Department of Public Health

Enclosure

cc: J. Robert Galvin, M.D., M.P.H., Commissioner, DPH
Katherine Kelley, M.P.H., Dr. P.H., BCLD, SPHL Director, DPH
E. Pizzoferrato, Project Manager, DPW
J. Bolton, Environmental Analyst, DPW
C. Gould, EIE Consultant, FHI (w/o encl.)

Distribution:

U.S. Army Corps of Engineers, Northeast District
Council on Environmental Quality
Department of Agriculture
Department of Environmental Protection
Department of Public Health (Regulatory Services Branch)
Department of Transportation
Department of Veterans' Affairs
Office of Policy and Management
State Historic Preservation Office
State Traffic Commission
Honorable Anthony LaRosa, Mayor of Rocky Hill
Rocky Hill Town Clerk
Cora J. Belden Library
Metropolitan District Commission
Capital Region Council of Governments

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Material
ADT	Average Daily Traffic
APE	Area of Potential Effect
AST	Above-Ground Storage Tanks
BMPs	Best Management Practices
CDC	Centers for Disease Control and Prevention
CEPA	Connecticut Environmental Policy Act
CEQ	Connecticut Council on Environmental Quality
CERC	Connecticut Economic Resource Center
CGS	Connecticut General Statutes
CL&P	Connecticut Light and Power
CNG	Connecticut Natural Gas
CO	Carbon Monoxide
ConnDOT	Connecticut Department of Transportation
CRCOG	Capitol Region Council of Governments
dBA	A-weighted decibels
DEP	Connecticut Department of Environmental Protection
DPH	Connecticut Department of Public Health
DPW	Connecticut Department of Public Works
DVA	Connecticut Department of Veterans' Affairs
EIE	Environmental Impact Evaluation
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GSF	Gross Square Feet
HCS	Highway Capacity Software
HVAC	Heating Ventilation and Air Conditioning
LBP	Lead-Based Paint
LCCA	Life-Cycle Cost Analysis
LEEDS	Leadership in Energy and Environmental Design
LOS	Level of Service
LWCF	Land and Water Conservation Fund
MDC	Metropolitan District Commission
NAAQS	National Ambient Air Quality Standards
NDDB	Natural Diversity Database
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxide
NSF	Net Square Feet
O_3	Ozone
OPM	Connecticut Office of Policy and Management
OSHA	Occupational Safety and Health Administration
Pb	Lead

PCBs	Polychlorinated Biphenyls
PM_{10}	Particulate Matter (PM with a diameter of 10 microns or less)
$PM_{2.5}$	Particulate Matter (PM with a diameter of 2.5 microns or less)
PPM	Parts Per Million
POCD	Plan of Conservation and Development
RCSA	Regulations of Connecticut State Agencies
RSRs	Remediation Standards Regulations
SCEL	Stream Channel Encroachment Line
SF	Square Feet
SHPO	State Historic Preservation Office/Officer
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SPHL	State Public Health Laboratory
STC	State Traffic Commission
SPOCD	State Plan of Conservation and Development
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

Project Name: Proposed Public Health Laboratory, Rocky Hill, Connecticut
(DPW Project #BI-2B-179)

Date: June 6, 2006

Sponsoring Agency: State of Connecticut Department of Public Health

Participating Agency: State of Connecticut Department of Public Works

Preparer: Fitzgerald & Halliday, Inc., 72 Cedar Street, Hartford, Connecticut 06106

Project Background

Section 19a-26 of the Connecticut General Statutes (CGS) authorizes the creation of a State Laboratory within the Department of Public Health (DPH) to conduct "examinations of supposed morbid tissues, other laboratory tests for the diagnosis and control of preventable diseases, and laboratory work in the field of sanitation, environmental and occupational testing and research studies for the protection and preservation of the public health". The first State Public Health Laboratory (SPHL or the Laboratory) was established in 1905 to meet this purpose: to provide those vital laboratory services that would enable DPH to protect the public health and, in doing so, promote the welfare of state residents.

The existing SPHL is located at 10 Clinton Street in downtown Hartford. The Laboratory provides a wide array of testing services in clinical and environmental microbiology, biochemistry, and chemistry. It offers over 400 types of tests, processes more than 260,000 samples annually, and performs over two million analyses a year. The Laboratory supports most of DPH's public health programs, including:

- Disease detection/ epidemiology
- Childhood lead poisoning prevention
- Newborn screening
- HIV/AIDS and sexually transmitted disease control
- Tuberculosis control
- Environmental health (e.g., asbestos)
- Safe drinking water

The SPHL also provides services to almost 4,000 clients. The client profile is very diverse, including both state and local agencies as well as the private sector. Some laboratories and private clients in other states also use the SPHL as a resource. In addition to these services, the SPHL has been a site for the development of testing methodologies to address diseases of national public health importance. In association with these varied functions, the SPHL maintains certification with a myriad of accrediting agencies.

The SPHL was constructed in 1965, with an addition constructed in 1980. It sits on about 1.5 acres in downtown Hartford, surrounded by other urban buildings. The building has five stories and on-site parking for 92 vehicles (Figure ES-1). A *Comprehensive Facility Plan, Department of Public Health Laboratory* (Department of Public Works [DPW], June 1, 2001) (the facilities plan) was completed to assess the Laboratory's condition and plan for its future operations.

Figure ES-1: Location of Existing State Public Health Laboratory

In general, the facilities plan concluded that the Laboratory buildings are in poor condition, have outlived their useful life, and would require complete renovation to provide more adequate space and improve operations, safety, and efficiency. The option of renovation was therefore examined, with key findings being the following:

- The building is fully occupied by three tenants with no room for expansion

- While the Laboratory has maintained mandatory licenses, accreditations and certifications for its operations to date, the Laboratory building itself is not in compliance with most standards and guidelines recommended by voluntary national standard-setting organizations
- The building is not uniformly equipped with sprinklers for fire response
- Mechanical systems are in generally poor condition, with many components of HVAC, plumbing, electrical, and fire protection requiring immediate replacement or upgrade
- The configuration of the existing analytical areas, including ceiling heights, is inadequate to allow the addition of many pieces of contemporary laboratory equipment
- Asbestos is present in many parts of the Laboratory and significant abatement would be necessary prior to any renovation
- There are also site issues of inadequate parking and loading space and inconvenient access to the building
- The mix of deliveries and general parking is hazardous

The facilities plan noted that the Laboratory poses some vulnerabilities, albeit ones that can be well managed, due to the materials it handles and tasks it performs. Its location in the heart of Connecticut's capitol city with many people in and around the building on a daily basis is less than ideal. The plan concluded that the cost to renovate the existing facility into what would remain as less-than-ideal space would exceed the cost to build a new state-of-the-art facility. Accordingly, the plan recommended that the most effective solution would not be renovation of 10 Clinton Street but the construction of a new laboratory on a new site outside of Hartford.

Since the facilities plan was completed in 2001, the building has continued to deteriorate, while demands on laboratory services have simultaneously increased greatly. At this juncture, the building has deteriorated beyond the point at which renovation remains a reasonable option.

Project Description – The Proposed Action

DPH, in conjunction with DPW, is proposing to construct a new SPHL. All DPH laboratory functions currently carried out at the downtown Hartford site would be relocated to a new site.

The new Laboratory (the Proposed Action) would include approximately 120,000 square feet of building, associated site improvements, and approximately 240 parking spaces. It would be located on property of about 23 acres currently under the care and custody of Connecticut's Department of Environmental Protection (DEP) and Department of Veterans' Affairs (DVA) in Rocky Hill, Connecticut (Figure ES-2). The site proposed for the Laboratory would be transferred to the care and custody of DPH. The preliminary concept for the Proposed Action calls for a two-story building, with the parking situated in front to the south. The entire site would be secured with fencing; access at the entrance drive would be controlled. Access to the Proposed Action would be exclusively from West Street in Rocky Hill.

The proposed facility would provide state-of-the-art laboratories to support DPH's current programs, would enable the SPHL to more effectively handle testing in support of public health emergencies, and would include adequate space to expand services in the future. The Proposed Action would also provide sufficient parking to offer space for each current staff member, new staff that may be hired for future expanded operations, and visitors, including couriers and those attending meetings and training.

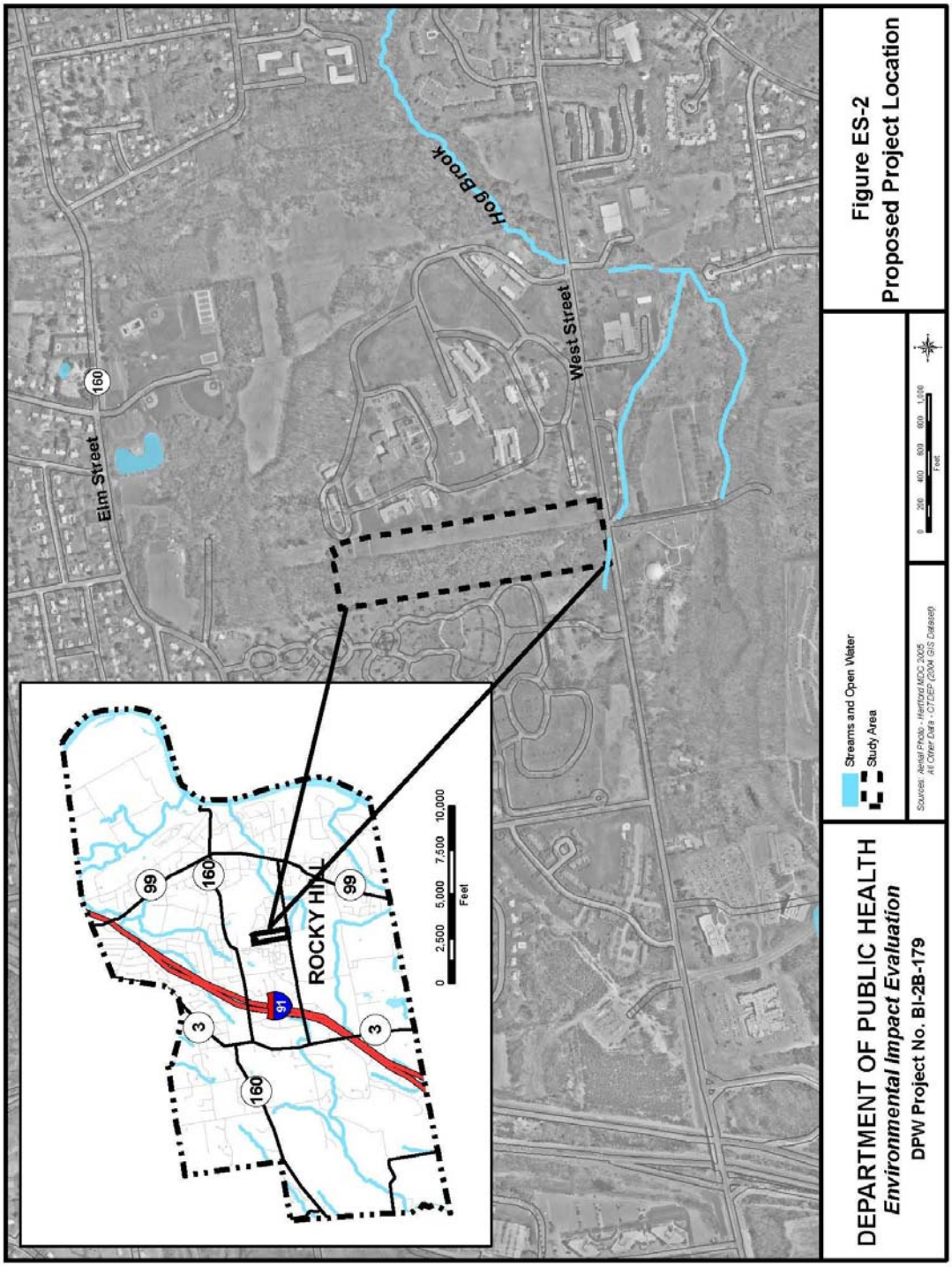
Site Selection for the Proposed Action

DPH considered 12 alternative sites for a new laboratory between October 2000 and December 2004. The following criteria were utilized to evaluate the suitability of the sites considered:

- Meets the purpose and need for the project
- Site is available to DPH for use
- Access for clients/rapid emergency response
    - Close to a state highway
    - In central Connecticut
- Potential for sufficient site security and buffer from adjoining land use
- Space for all analytic areas on one floor
- Adequate supporting infrastructure/served by public water and sewer
- Room for future expansion
- Acceptable site costs
- Compatible with surrounding land use

As a result of the site evaluation process, it was determined that the DEP/DVA site in Rocky Hill best met the site selection criteria and was the only prudent and feasible location for the Proposed Action. The table in Appendix B itemizes the sites that were evaluated and the rationale for eliminating them from further consideration.

Figure ES-2: Proposed Project Location



Purpose and Need

Purpose

The purpose of the Proposed Action is to supply a state-of-the-art SPHL facility for DPH. The goal is to develop a laboratory that can meet DPH's current program needs as well as offer the capability to take on new roles and provide new or expanded services in the future.

The Proposed Action is intended to improve the capacity of the SPHL to meet its mission. The Laboratory's mission is to conduct tests and to provide data to protect and improve the health of Connecticut's residents and communities. The Laboratory is responsible for providing state-wide services in support of programs in DPH and other state agencies, local health departments, health care providers and other clients. The SPHL also provides aggregate data supporting national public health surveillance programs conducted by several federal agencies.

The SPHL directly benefits the public health through programs such as newborn screening. Early identification and treatment lead to improved health outcomes, and avoid the tremendous social and economic burdens of the diseases and disabilities that would otherwise occur. The Laboratory also tests infants and children for elevated blood lead levels. Childhood lead poisoning is associated with learning impairments, neurobehavioral disorders, and various chronic health conditions. Prevention and early intervention improve health status and reduce social and economic costs of lifelong disability and disease.

The Laboratory provides many services to local health departments throughout the state, all at no cost to the municipalities. When an infectious or food-borne outbreak occurs, the Laboratory conducts testing to help identify the source and contain the spread of disease. A wide range of tests are performed every day to ensure the safety of the state's drinking and recreational waters, as well as to monitor environmental quality in schools, workplaces, and community facilities.

In the wake of the terrorist incidents of 2001, the Laboratory has played an increasingly vital role in homeland security. On an ongoing basis, the Laboratory performs testing for the United States Postal Service, to help ensure the safety of mail coming into Connecticut's homes and communities. In the event of an actual biological or chemical event, the Laboratory would provide analytic services to help determine the source and nature of the agent, manage the response, and monitor clean-up or recovery efforts. In the event of a radiological incident, the Laboratory would provide analytic support to DEP by monitoring the food supply for radiological contamination. In Connecticut, the SPHL is the only laboratory that is authorized to provide these services to protect the public.

The SPHL provides a direct economic benefit to the State of Connecticut. The Proposed Action will enable the Laboratory to continue its role in support of private health care providers, health care institutions, other governmental entities, and educational institutions. Consequently, it will support the financial stability and future of those key sectors of Connecticut's economy.

Need

The new Laboratory is needed to resolve the inadequacies of the existing Laboratory facility and allow the SPHL to continue to provide the critical services it renders to the state in accordance with modern standards. The new Laboratory is needed to resolve current issues of inadequate space, operational constraints, system inefficiencies and inadequacies, and vulnerabilities posed by its location in downtown Hartford.

Space Issues: The future space needs of the SPHL total an estimated 90,180 net square feet (NSF), considerably more space than the current Laboratory buildings can provide. There is no physical space on the Clinton Street property to add on to the existing buildings, except vertically (more stories).

Even if more stories were added to the Clinton Street buildings, they still would not meet the needs of the Laboratory in terms of space configuration, parking, loading and storage of samples and supplies. Renovation of the existing SPHL space to overcome these shortcomings is not feasible or practical, since it would require such actions as raising the ceiling heights. In addition, the building is not ADA compliant and has elevators and bathrooms that are too small to accommodate wheelchair turning radius. Renovation to less-than-ideal space would be cost-prohibitive.

The Clinton Street property provides 92 parking spaces. With 110 current employees, this is inadequate to meet staff and visitor needs, including couriers and participants at meetings and training. In addition, truck access is limited and the interior loading docks have limited headroom and maneuvering space. The facilities plan concluded that the mix of deliveries and general parking is hazardous.

Operational Issues: The current Laboratory facility has a number of functional problems including:

- Poor condition of the building and an associated aging infrastructure that is ill-suited to current and future needs
- Analytic areas which are not and cannot be configured to support increased use of automation and multidisciplinary testing approaches
- Lack of appropriate heating, air conditioning (HVAC) and temperature control
- Poor ventilation and air quality throughout the building
- Fume hoods that are poorly located in main circulation paths and have exhaust systems that are subject to unexpected failure
- Lack of adequate bio-isolation facilities
- Lack of adequate support facilities such as storage for chemicals and waste materials
- Most storage is fragmented
- The loading dock does not provide for the separation of incoming supplies such as clean laundry and outgoing waste material

- Lack of contemporary communications systems such as computer networking and teleconferencing/videoconferencing capabilities

Efficiency Issues: The current configuration of the Laboratory is inefficient and much of the space, as currently configured, is inappropriate to its current function. SPHL operations are spread vertically on five floors, complicating quality control, flow of testing samples, staff communication, and movement of equipment. The limited parking, constrained loading docks for truck deliveries, and inadequate storage facilities contribute to inefficient movement of materials into and within the building. The individual analytic areas with the greatest traffic demand in terms of movement of materials and samples are located inconveniently on the fourth floor rather than near building entrances. This contributes to a higher level of foot traffic within the building and longer than optimal transit distances from intake to delivery at analytic areas. Finally, the Laboratory building's outdated and inefficient heating and cooling systems result in one of the highest energy consumption demands of any facility operated by DPW.

Location Issues: The current Laboratory is in a fully developed urban center and sits in an historic neighborhood that has evolved into a cultural and state government center. The state capitol building is approximately a quarter mile to the west. Given the types and range of hazardous materials the DPH Laboratory must handle daily, its location is not ideal. It would be preferable to locate the facility where the property boundaries can be fully secured to meet today's potential security threats and where the level of human activity in the immediate surroundings is less intense.

Alternative Actions

The purpose of the Proposed Action is to provide a state-of-the-art laboratory with advanced technology that meets key elements of DPH's mission. The three potential alternative actions that were identified to assess whether they could meet this purpose were: 1) to renovate and upgrade the existing Clinton Street laboratory; 2) to build a new laboratory; or 3) to do nothing (no-action).

Renovation Alternative

Under this alternative, the SPHL would remain in its current location with renovations and upgrades, as feasible, to the facilities. In general, the existing Laboratory building is in poor condition and would require complete renovation to provide more adequate space and improve operations, safety, and efficiency. The facilities plan documented that the SPHL needs an additional 24,300 NSF to support both current and future operations. There is no physical space to add on to the Clinton Street property to provide this space, except vertically with more stories. This would constrain the efficiency of operations even more than today's conditions. Since the SPHL was built (and expanded), laboratory technology has advanced rapidly and the breadth of services required of DPH has grown such that the existing Laboratory has become critically outdated. In addition, the configuration of the existing individual analytic areas, including ceiling heights, prevents the use of some contemporary equipment that would enhance or allow for new laboratory testing programs.

Since 2001 when the facility analysis was conducted, the existing Laboratory building infrastructure has deteriorated to the extent that the option of renovation has become cost-prohibitive and would fall far short of meeting the SPHL needs. The cost of complete renovation of the existing Laboratory would be greater than new construction. Consequently, renovation is not practical or feasible. For these reasons, renovation of the existing Clinton Street Laboratory was eliminated from further consideration as an alternative action.

Build New Laboratory Alternative (the Proposed Action)

Under this alternative, a new SPHL would be constructed in a new location to include approximately 120,000 square feet of building, associated site improvements, and approximately 240 parking spaces. Constructing a new SPHL would provide state-of-the-art laboratories to support DPH's current programs, enable the SPHL to more adequately handle testing in support of public health emergencies, and would include adequate space to expand services in the future. This alternative was selected as the preferred alternative (Proposed Action) as it best meets the project purpose and need by:

- Allowing DPH to meet its mission for the SPHL both in the near and long-term
- Providing space for all analytic areas on one floor
- Providing a facility configuration that supports modern, state-of-the art laboratory equipment and analytic processes
- Providing for sufficient site security and buffer from adjoining land use
- Locating the Laboratory in a more suitable setting, more appropriately separated from intense human activity

No-Action Alternative

The No-Action Alternative would maintain the current operation and configuration of the Clinton Street Laboratory and assumes essential repairs, upgrades, and maintenance to address fundamental safety, operational, and other limitations. The No-Action Alternative would not meet the purpose and need for the project. As such, it would prohibit the SPHL from continuing to adequately fulfill its required functions in order to protect the public health. These factors lead to the conclusion that the No-Action Alternative is not a preferred alternative. Nonetheless, the potential impacts of the No-Action Alternative have been considered in comparison to the Proposed Action throughout this EIE.

Alternative Sites Controlled or Reasonably Available

Controlled Sites

DPH does not have sites that are under its control (care and custody). The existing Clinton Street Laboratory site is under the control of DPW. However, irrespective of which agency has control of the Clinton site, as stated above, the No-Action and Renovation Alternatives

are not feasible or practical. Therefore, the Clinton Street Laboratory site was eliminated from further consideration as an alternative site.

Reasonably Available Sites

DPH considered numerous sites over the past several years that were eliminated as viable sites for various reasons. As a result, those sites are not considered reasonably available to DPH. A list of these sites and the reasons for their elimination is provided in Appendix B.

However, existing state-owned property in Rocky Hill was identified as a viable site by DPH and DPW. The site is under the care and custody of the DEP and DVA and is located along West Street in Rocky Hill, Connecticut (Figure ES-2) (the Rocky Hill site). DEP and DVA have no plans for use for their respective portions of the site and there are no known encumbrances or deed restrictions. Both DEP and DVA are amenable to transferring the care and custody of the required property to DPH for the Proposed Action. Therefore, this property (as well as the existing Clinton Street Laboratory) was considered a potential site during the CEPA public scoping process that was initiated on May 17, 2005.

The Rocky Hill site is approximately 23 acres, encompassing the entire DEP parcel that is associated with Dinosaur State Park north of West Street (15.4 acres) and a small portion of the DVA property adjacent to the DEP parcel (7.6 acres).

Based on the foregoing circumstances associated with the site, comments received during the scoping process, and review of the siting criteria, the Rocky Hill site has been identified as being reasonably available to DPH and based on the previously considered sites, this site is the only prudent and feasible location for the Proposed Action. Therefore, the Rocky Hill site for the Proposed Action is discussed in detail throughout this EIE.

Transfer of care and custody of the site would occur after the Office of Policy and Management (OPM) issues a determination of adequacy for the EIE and upon the successful completion of a conversion process that would compensate for the loss of open space.

Impact Analysis Summary

The implementation of the Proposed Action will have limited adverse environmental impacts that can be mitigated. Anticipated impacts and corresponding proposed mitigation measures are summarized in Table ES-1.

Table ES- 1: Summary of Impacts and Proposed Mitigation

Resource	Impact Analysis	Mitigation
Land Use and Zoning	No adverse impacts	No mitigation required
Consistency with Local and Regional plans	Consistent with plans	No mitigation required
Consistency with SPOCD	Consistent with Neighborhood Conservation Area; conflicts with Open Space Preservation designation for parcel for Proposed Action	Compensation through Land and Water Conservation Fund process
Traffic and Parking	No adverse impacts	No mitigation required
Air Quality	Construction period impacts: Potential impacts from prolonged use of diesel powered vehicles. Typical diesel air quality emissions include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (PM2.5).	▪ Contractor bid specifications will utilize DPW's diesel emission reduction specifications ▪ Construction equipment will be required to comply with all pertinent state and federal regulations
Noise	Construction period impacts: Potential for continuous as well as intermittent (or impulse) noise to be experienced in the immediate project vicinity	• Erect temporary noise barriers around the work site • Maintain a wooded buffer between the facility and surrounding land uses • Install and maintain properly functioning muffler devices on all construction equipment • Adhere to the Town of Rocky Hill noise regulations • Perform a test blast for vibration monitoring and monitor blast vibrations to ensure compliance with vibration criteria • Limit blasting to between 8:00 AM and 5:00 PM Monday through Friday
Neighborhoods and Housing	Minor adverse visual and character impact	Maintain buffer of native vegetation on three sides of the proposed site

Table ES-1 Continued

Resource	Impact Analysis	Mitigation
Water Quality	Construction period impacts: Possible sedimentation of streams and wetlands due to construction	During construction, temporary BMPs will be employed and an erosion and sedimentation control plan will be implemented
Hydrology and Floodplains	No adverse impacts	No mitigation required
Wetlands	Construction period impacts: Possible sedimentation of streams and wetlands due to construction	During construction, temporary BMPs will be employed and an erosion and sedimentation control plan will be implemented
Flora, Fauna, Threatened and Endangered Species	No adverse impacts	No mitigation required
Soils and Geology	Use of about seven acres of prime farmland soils; no active farm uses affected	No mitigation required
Cultural Resources	Adverse visual impact to the State Register listed DVA campus; potential for prehistoric archeological resources	Natural buffer screening maintained along the western edge of the DVA property; conduct a Phase IB and consultation with SHPO is ongoing to determine mitigation measures for below-ground resources
Solid Waste and Hazardous Materials	Construction period impacts: Generation of construction waste material	Construction waste materials containing solvents will be handled by licensed waste hauler
Use/Creation of Hazardous Materials	No adverse impacts	No mitigation required
Aesthetics and Visual Effects	Adverse visual impacts to DVA campus and Rose Hill Cemetery	A landscaping plan with a natural buffer will be maintained or developed to provide visual screening
Energy Uses and Conservation	Beneficial impact due to energy conservation measures Construction period impacts: Increased local demand for fossil fuels and an increased demand for electricity during construction	No mitigation required
Public Utilities and Services	Potential for increased stormwater runoff due to increase in impervious surfaces Potential construction period impacts to stormwater flows and utility service	BMPs employed to ensure proper handling of stormwater runoff Proactive coordination with utility providers prior to construction to ensure full coordination on new service connections and minimize utility service disruptions
Public Health and Safety	No local adverse public health impacts; state-wide beneficial impacts	No mitigation required

List of Potential Permits and Approvals

The following permits, approvals, certifications and registrations may be required for completion of the Proposed Action:

Federal

- U.S. Army Corps of Engineers Category 1 Connecticut Programmatic General Permit (Non-reporting/Minimal Impacts)

State

- DEP Miscellaneous Discharges of Sewer Compatible Wastewater
- DEP Wastewater Discharge
- DEP Section 401 Water Quality Certification
- DEP New Source Review (Air Emissions)
- DEP Inland Wetlands/Watercourse Permit
- DEP General Permit for Stormwater and Dewatering Wastewaters from Construction
- DEP Flood Management Certification (CGS, Section 25-68d)
- Connecticut State Historic Preservation Office (SHPO) – ongoing consultation
- State Traffic Commission Certificate of Major Traffic Generator

Local

- Local utility connections

Coordination Process

The coordination process for this EIE has included a public scoping process and ongoing agency coordination. The public scoping processes under CEPA included issuance of a Scoping Notice in Connecticut's Environmental Monitor on May 17, 2005 and a Public Scoping Meeting conducted on June 13, 2005 to further solicit comments from state agency reviewers and other interested parties. Various resource agencies were also directly consulted during the data collection phase of this project. A copy of the public scoping notice and responses received from the formal public scoping are included in Appendix A.

Conclusion

The Proposed Action is essential for the maintenance and enhancement of the vital functions of the State Public Health Laboratory, which benefits all Connecticut residents. The relocation of the facility outside of the State's capitol will allow for construction of a state-of-the-art Laboratory that can fully perform all current and anticipated future critical SPHL functions on a more secure site in keeping with contemporary security concerns. Potential adverse effects anticipated include minor visual impacts on adjacent land uses, loss of open space, increased stormwater runoff, potential impacts to historic and archeological resources, and construction-

period impacts relative to noise, air quality, energy usage, and stormwater. These impacts will be mitigated through landscaping, no net loss of open space, proper management of materials and resources during and after construction, adherence to all applicable local, state, and federal regulations, and coordination with resource agencies. Through its impact avoidance and mitigation measures, the Proposed Action will not incur any significant environmental impacts.

Review Period and Comments

Review agencies and other interested parties are offered an opportunity to provide comments and other pertinent information that would help define environmental impacts, interpret the significance of such impacts, and evaluate alternatives. Written comments on this document and any other pertinent information may be submitted to the agency contact listed below by delivery or postmark by July 21, 2006. A public hearing on the Proposed Action will be held on July 12, 2006 at 7 p.m. at Rocky Hill Town Hall, Council Chambers, 761 Old Main Street, Rocky Hill, Connecticut.

The submitted materials and responses, along with the Executive Summary of the EIE, will be attached to a Record of Decision that will be forwarded to the State Office of Policy and Management for a determination of its adequacy.

Agency Contact

Department of Public Health
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EIE Distribution List

Federal Agencies

- U.S. Army Corps of Engineers, Northeast District

State Agencies

- Council on Environmental Quality
- Department of Agriculture
- Department of Environmental Protection
- Department of Public Health (Regulatory Services Branch)
- Department of Transportation
- Department of Veterans' Affairs
- Office of Policy and Management

- State Historic Preservation Office
- State Traffic Commission

Local Government/Agencies

- Honorable Anthony LaRosa, Mayor of Rocky Hill
- Rocky Hill Town Clerk
- Cora J. Belden Library
- Metropolitan District Commission
- Capital Region Council of Governments

1. INTRODUCTION

1.1. DESCRIPTION OF PROPOSED ACTION

Background

Section 19a-26 of the Connecticut General Statutes (CGS) authorizes the creation of a State Laboratory within the Department of Public Health (DPH) to conduct "examinations of supposed morbid tissues, other laboratory tests for the diagnosis and control of preventable diseases, and laboratory work in the field of sanitation, environmental and occupational testing and research studies for the protection and preservation of the public health". The first State Public Health Laboratory (SPHL or the Laboratory) was established in 1905 to meet this purpose: to provide those vital laboratory services that would enable DPH to protect the public health and, in doing so, promote the welfare of state residents.

The existing SPHL is located at 10 Clinton Street in downtown Hartford. It currently employs approximately 110 full-time staff, two-thirds of whom are degreed professionals. The Laboratory provides a wide array of testing services in clinical and environmental microbiology, biochemistry, and chemistry. It offers over 400 types of tests, processes more than 260,000 samples annually, and performs over two million analyses a year. Depending on the nature of the samples, they may be retained in secure storage for lengthy periods and subject to 'chain of custody' requirements. The Laboratory supports most of DPH's public health programs, including:

- Disease detection/ epidemiology
- Childhood lead poisoning prevention
- Newborn screening
- HIV/AIDS and sexually transmitted disease control
- Tuberculosis control
- Environmental health (e.g., asbestos)
- Safe drinking water

The SPHL provides services to almost 4000 clients. The client profile is very diverse, including both state and local agencies as well as the private sector. The list of clients includes:

- Department of Environmental Protection (DEP)
- Department of Agriculture
- Department of Consumer Protection
- Department of Correction
- Department of Labor

- Department of Transportation
- State and federal law enforcement agencies
- Local health departments and districts
- Local animal control officers
- Hospitals, physicians offices, and other health care facilities (i.e., convalescent homes and private clinics)
- Water utilities
- Veterinarians
- Private clinical and environmental laboratories
- Institutions of higher education

Some laboratories and private clients in other states also use the SPHL as a resource. The SPHL has been a site for the development of testing methodologies to address diseases of national public health significance and has assisted in the development of analytic methods for emerging chemical contaminants. In this capacity, it provides aggregate testing data for national public health surveillance purposes to the federal Centers for Disease Control and Prevention (CDC), Environmental Protection Agency (EPA), National Institute of Occupational Safety and Health, and Occupational Safety and Health Administration. It has pioneered the development of new tests for key diseases, including salmonella poisoning, strep, Lyme disease and West Nile virus. Additionally, the SPHL is one of just nine state labs participating in two food-borne disease surveillance programs being pioneered by CDC. In association with these varied functions, the SPHL maintains licensure, accreditation, and certification with a myriad of agencies. These include:

- American Industrial Hygiene Association - Accreditation for Environmental Lead Testing
- National Institute of Standards and Technology - Certificate of Accreditation for Bulk Asbestos Analysis
- U.S. Department of Agriculture - License for the Transport of Specific Materials
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention - Certificate of Registration of Select Agents
- State of Connecticut Department of Environmental Protection - Registration for Radiological Devices
- State of Connecticut Department of Public Health - Licensed Clinical Laboratory and Licensed Environmental Laboratory
- Centers for Medicare & Medicaid Services - Certification of Compliance for Clinical Testing
- U.S. Environmental Protection Agency - Certification of Drinking Water Analysis
- U.S. Food and Drug Administration - Certification for Dairy Testing and Certification for Shellfish Water Testing

The Laboratory has four major organizational elements. One is Administrative Services, which provides administrative and scientific support services. The other three, Environmental

Chemistry, Biomonitoring, and Biological Sciences Services, provide analytic functions and include 14 separate laboratory units.

The SPHL was constructed in 1965, with an addition constructed in 1980. It sits on about 1.5 acres in downtown Hartford, surrounded by other urban buildings. A *Comprehensive Facility Plan, Department of Public Health Laboratory* (Department of Public Works [DPW], June 1, 2001) (the facilities plan) was completed to assess the Laboratory's condition and plan for its future operations. It documented that the buildings provide 75,892 net square feet (NSF) of space. Of this, DPH occupies about 56,880 NSF, while the Department of Public Safety (DPS) and DEP occupy the remainder. The building has five stories and on-site parking for 92 vehicles (see Figure 1).

Figure 1: Existing State Public Health Laboratory Site

In general, the facilities plan concluded that the Laboratory buildings are in poor condition, have outlived their useful life, and would require complete renovation to provide more

adequate space and improve operations, safety, and efficiency. The option of renovation was therefore examined, with key findings being the following:

- The building is fully occupied by three tenants with no room for expansion
- While the Laboratory has maintained mandatory licenses, accreditations and certifications for its operations to date, the Laboratory building itself is not in compliance with most standards and guidelines recommended by voluntary national standard-setting organizations
- The building is not uniformly equipped with sprinklers for fire response
- Mechanical systems are in generally poor condition, with many components of HVAC, plumbing, electrical, and fire protection requiring immediate replacement or upgrade.
- The configuration of the existing analytical areas, including ceiling heights, is inadequate to allow the addition of many pieces of contemporary laboratory equipment
- Asbestos is present in many parts of the Laboratory and significant abatement would be necessary prior to any renovation.
- There are also site issues of inadequate parking and loading space and inconvenient access to the building
- The mix of deliveries and general parking is hazardous

The facilities plan noted that the Laboratory poses some vulnerabilities, albeit ones that can be well managed, due to the materials it handles and tasks it performs. Its location in the heart of Connecticut's capitol city with many people in and around the building daily is less than ideal.

The plan concluded that the cost to renovate the existing facility into less-than-ideal space would exceed the cost to build a new state-of-the-art facility. Accordingly, the plan recommended that the most effective solution would not be renovation but the construction of a new laboratory on a new site outside of Hartford.

Since the facilities plan was completed in 2001, the building has continued to deteriorate, while demands on laboratory services have simultaneously increased greatly. Significant mechanical failures have occurred, which have required substantial expenditures to repair, and flooding has been a recurrent problem, jeopardizing the integrity of samples, instruments, and computer equipment. At this juncture, the building has deteriorated beyond the point at which renovation remains a reasonable option.

The Proposed Action

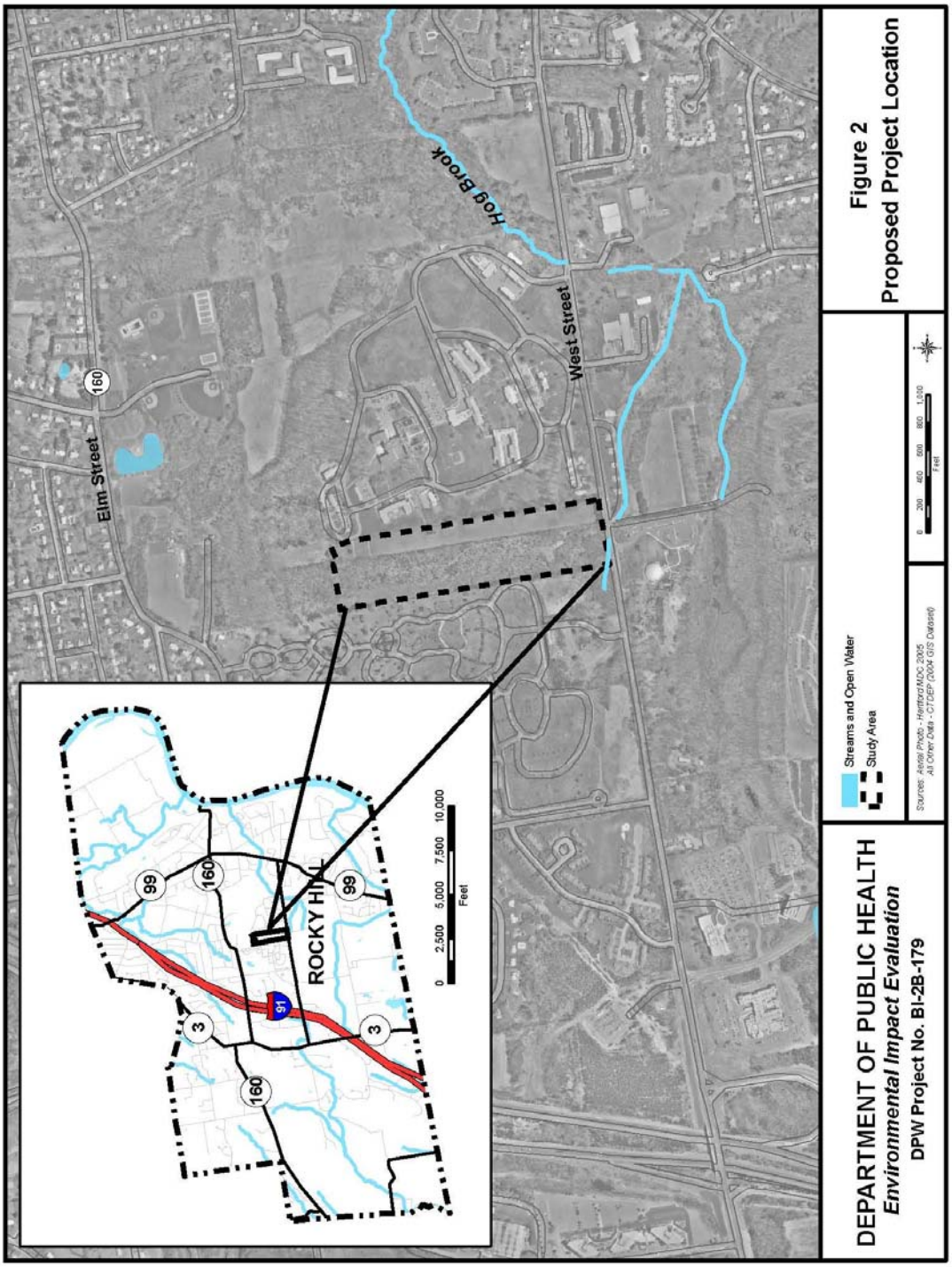
DPH, in conjunction with DPW, is proposing to construct a new SPHL. All laboratory functions currently carried out at the downtown Hartford site would be relocated to the proposed new SPHL site.

The new laboratory facility (the Proposed Action) would include approximately 120,000 square feet of building, associated site improvements, and approximately 240 parking spaces.

This would offer sufficient parking for each current staff member (about 110 employees) plus new staff that may be hired for future expanded operations, as well as visitors. The Proposed Action would be located on property currently under the care and custody of DEP and the Department of Veterans' Affairs (DVA) in Rocky Hill, Connecticut (the Rocky Hill site).

The site proposed for the Laboratory is shown in Figure 2. The property would be transferred to the care and custody of DPH following a determination by the Office of Policy and Management (OPM) of the adequacy of this EIE and upon the successful completion of a conversion process that would compensate for the loss of open space. The preliminary concept for the Proposed Action calls for a two-story building, with parking situated in front to the south. The entire site for the Proposed Action would be secured with fencing and access at the entrance drive would be controlled. Access to the Proposed Action would be exclusively from West Street in Rocky Hill.

Figure 2: Proposed Project Location



The proposed facility would provide state-of-the-art laboratories to support DPH's current programs, would be able to adequately handle testing in support of public health emergencies, and would include adequate space to expand services in the future. In addition to the existing labs, the DPH envisions adding more individual laboratories and new technologies in the future including:

- Additional high-level bio-safety laboratory capacity
- Expanded bio-monitoring laboratory capacity
- Expanded chemical terrorism laboratory capacity
- Genetics testing lab including computer sequencing workstations of 4,384 net square feet
- Emerging sciences program administration offices, conference room, office equipment (e.g. copiers), and storage space of 375 net square feet

This proposed Action would also provide sufficient parking to offer space for each current staff member plus new staff that may be hired for future expanded operations, and visitors, including those attending meetings.

Site Selection for the Proposed Action

DPH considered 12 alternative sites for a new laboratory between October 2000 and December 2004. The following criteria were utilized to evaluate the suitability of the sites considered:

- Meets the purpose and need for the project
- Site is available to DPH for use
- Access for clients/rapid emergency response
    - Close to a state highway
    - In central Connecticut
- Potential for sufficient site security and buffer from adjoining land use
- Space for all analytic areas on one floor
- Adequate supporting infrastructure/served by public water and sewer
- Room for future expansion
- Acceptable site costs
- Compatible with surrounding land use

Of the sites considered, nine were offered in response to a solicitation for sites in the spring of 2003 (including one site previously under consideration). Five of those nine were rejected immediately due to unsuitable location or incompatible surrounding land uses. Of the remaining available sites, one was subsequently sold and became unavailable. The remaining sites were evaluated against the site selection criteria.

As a result of the site evaluation process, it was determined that the DEP/DVA site in Rocky Hill best met the site selection criteria and was the only prudent and feasible location for the

Proposed Action. The table in Appendix B itemizes the sites that were evaluated and the rationale for eliminating them from further consideration.

1.2. PURPOSE AND NEED

Purpose

The purpose of the Proposed Action is to supply a state-of-the-art SPHL facility for DPH. The goal is to develop a laboratory that can meet DPH's current program needs as well as offer the capability to take on new roles and provide new or expanded services in the future.

The Proposed Action is intended to improve the capacity of the SPHL to meet its mission. The Laboratory's mission is to conduct tests and to provide data to protect and improve the health of Connecticut's residents and communities. The Laboratory is responsible for providing state-wide services in support of programs in DPH and in other state agencies, local health departments, health care providers, and other clients. Most of the testing performed by the Laboratory is not available in the private sector or from any other source.

The SPHL directly benefits the public health through programs such as newborn screening. Each of the approximately 43,000 babies born in Connecticut each year is screened by the Laboratory for 42 inherited disorders. Babies identified through this screening are promptly referred for diagnosis and treatment. Many of the disorders for which the Laboratory screens cause permanent disability, or even death, if untreated. Early identification and treatment lead to improved health outcomes, and avoid the tremendous social and economic burdens of the disabilities that would otherwise occur.

The Laboratory also tests infants and children for elevated blood lead levels. When a child is identified with an elevated lead level, environmental samples such as paint and soils are also tested to identify the source of the exposure. After remediation is done, environmental samples are again tested to ensure that the home is safe for the child's return. Childhood lead poisoning is associated with learning impairments, neurobehavioral disorders, and various chronic health conditions. Prevention and early intervention improve health status and reduce social and economic costs of lifelong disability and disease.

The Laboratory provides many services to local health departments throughout the state, all at no cost to the municipalities. When an infectious or food-borne outbreak or environmental contamination occurs, the Laboratory conducts testing to help identify the source and contain the spread of disease, and provides technical assistance in support of investigations by local health departments and DEP. When a human is exposed to an animal whose rabies status is uncertain, the Laboratory performs tests to determine whether immunization is needed. A wide range of tests are performed every day to ensure the safety of the state's drinking and recreational waters, as well as to monitor environmental quality in schools, workplaces, and communities.

In the wake of the terrorist incidents of 2001, the Laboratory has played an increasingly vital role in homeland security. The SPHL responded when the anthrax case was identified in Connecticut. The Laboratory tested over 2000 samples in support of the federal investigation and the effort to identify and contain the source of the contamination. On an ongoing basis, the Laboratory performs testing for the United States Postal Service, to help ensure the safety of mail coming into Connecticut's homes and communities. Analyses performed at the Laboratory have been instrumental in obtaining federal convictions in two cases involving anthrax hoaxes. In the event of an actual biological or chemical event, the Laboratory would provide analytic services to help determine the source and nature of the agent, manage the response, and monitor clean-up or recovery efforts. In the event of a radiological incident, the Laboratory would provide analytic support to DEP by monitoring the food supply for radiological contamination. In Connecticut, the SPHL is the only laboratory that is authorized to provide these services to protect the public.

The SPHL provides a direct economic benefit to the State of Connecticut. The Proposed Action will also enable the Laboratory to continue its role in support of private health care providers, health care institutions, other government entities, and educational institutions. Consequently, it will support the financial stability and future of those key sectors of Connecticut's economy.

Need

The new laboratory is needed to resolve the inadequacies of the existing Laboratory facility and allow the SPHL to continue to provide the critical services it renders to the state in keeping with modern standards. As noted, the existing Laboratory was constructed in 1965 with an addition constructed in 1980. It was built to the standards of the day using then accepted materials including asbestos for insulation. Since that time laboratory technology has advanced rapidly and the breadth of services required of DPH has grown. The new Laboratory is needed to resolve current issues of inadequate space, operational constraints, system inefficiencies and inadequacies, and vulnerabilities posed by its location in downtown Hartford.

Space Issues: The existing laboratory buildings provide 75,892 net square feet (NSF) of space. Of this, DPH occupies about 56,880 NSF. The facilities plan estimated the DPH had an immediate need at year 2000 operating levels for an additional 11,000 NSF. It will need about an additional 23,200 NSF to support future operations. Consequently, the future space needs of the SPHL will total an estimated 90,180 NSF; more space than the current Laboratory buildings can provide. There is no physical space on the Clinton Street property to add on to the existing buildings, except vertically (more stories).

Even if more stories were added to the Clinton Street buildings, they still would not meet the needs of the Laboratory in terms of space configuration, parking, or loading and storage of samples and supplies. Renovation of the existing SPHL space to overcome these shortcomings is not feasible or practical, since it would require such actions as raising the ceiling heights. The Clinton Street Laboratory floor-to-ceiling heights are too short to allow

the use of more advanced laboratory equipment. In addition, the building is not ADA compliant and has elevators and bathrooms that are too small to accommodate wheelchair turning radius.

The Clinton Street property provides 92 parking spaces. With 110 current employees, this is inadequate to meet staff and visitor needs, including couriers and participants at meetings and training. Because the Laboratory is located in Downtown Hartford, and parking space in the neighborhood of the Laboratory is at a premium, there are no other nearby parking facilities with adequate available space to conveniently meet the parking shortfall. In addition, the two original loading docks are under the building, facing onto the parking area. Consequently, truck access is limited and the interior docks have limited headroom and maneuvering space.

Operational Issues: The current Laboratory facility has a number of functional problems including:

- Poor condition of the building and an associated aging infrastructure that is ill-suited to current and future needs
- Analytic areas which are not and cannot be configured to support increased use of automation and multidisciplinary testing approaches
- Lack of appropriate heating, air conditioning (HVAC) and temperature control
- Poor ventilation and air quality throughout the building
- Fume hoods that are poorly located in main circulation paths and have exhaust systems that are subject to unexpected failure
- Lack of adequate bio-isolation facilities
- Lack of adequate support facilities such as: workspace for receiving and preparing the current volume of samples; workspace and ventilation for glassware washing, sterilization, and media preparation; and storage and disposal of chemicals and waste materials
- Most storage is fragmented
- The loading dock does not provide for the separation of incoming supplies such as clean laundry and outgoing waste material
- Lack of contemporary communications systems such as computer networking and teleconferencing/videoconferencing capabilities

Efficiency Issues: The current configuration of the Laboratory is inefficient. Much of the space, as currently configured, is inappropriate to its current function. SPHL operations are spread vertically on five floors, complicating quality control, flow of testing samples, staff communication, and movement of equipment. The limited parking, constrained loading docks for truck deliveries, and inadequate storage facilities contribute to inefficient movement of materials into and within the building. The individual analytic areas with the greatest traffic demand in terms of movement of materials and samples are located inconveniently on the fourth floor rather than near building entrances. This contributes to a higher level of foot traffic within the building and longer than optimal transit distances from intake to delivery at analytic areas. Finally, the Laboratory building's outdated and inefficient heating and cooling

systems result in one of the highest energy consumption demands of any facility operated by DPW.

Location Issues: The current Laboratory is in a fully developed urban center and sits in an historic neighborhood that has evolved into a cultural and state government center. The state capitol building is approximately a quarter mile to the west. Given the types and range of hazardous materials the DPH Laboratory must handle daily, its location is not ideal. While the Laboratory has operated the past 40 years within all regulated safety protocols and has never exposed the general public to any health risk, it would be preferable to locate the Laboratory where the property boundaries can be fully secured to meet today's potential security threats and where the level of human activity in the immediate surroundings is less intense.

2. ALTERNATIVES CONSIDERED

2.1. ALTERNATIVE ACTIONS

The purpose of the Proposed Action is to provide a state-of-the-art laboratory with advanced technology that meets key elements of DPH's mission. The three potential alternative actions that were identified to assess whether they could meet the purpose were: 1) to renovate and upgrade the existing Clinton Street laboratory; 2) to build a new laboratory; or 3) to do nothing (no-action).

Renovation Alternative

In general, the Laboratory building is in poor condition and would require complete renovation to provide more adequate space and improve operations, safety, and efficiency. The facilities plan documented that DPH needs an additional 24,300 NSF to support both current and future operations. There is no physical space to add on to the Clinton Street property to provide this space, except vertically with more stories. This would constrain the efficiency of operations even more than today's conditions. The original wing of the SPHL was constructed in 1965, with an addition in 1980. It was built to meet the limited programmatic and technological needs of the SPHL in that era. Since that time, laboratory technology has advanced rapidly and the breadth of services required of a state public health laboratory has grown such that the existing facility has become critically outdated.

The current configuration of the Laboratory is inefficient in that DPH operations are already spread vertically on five floors, complicating quality control, flow of testing samples, staff communication, and movement of equipment. There is limited parking and inadequate space for unloading and storage of truck deliveries, and no available space to expand these functions. In addition, the configuration of the existing individual analytic areas, including ceiling heights, prevents the use of some contemporary equipment that would enhance or allow for new laboratory testing programs.

Since 2001 when the facility plan was conducted, the existing Laboratory building infrastructure has deteriorated to the extent that the option of renovation has become cost-prohibitive and would fall far short of meeting the SPHL needs. The conclusion of the plan was that the cost of complete renovation of the exiting Laboratory would be greater than new construction. Consequently, it was determined that renovation was not practical or feasible. For these reasons, renovation of the existing Clinton Street Laboratory was eliminated from further consideration as an alternative action.

However, the alternative to renovate the Clinton Street Laboratory would be expected to have a similar degree of environmental impact as the Proposed Action. It could be anticipated to have some effect on traffic, visual setting, hazardous materials, and historic resources. This

alternative would be consistent with the *Conservation and Development Policies Plan for Connecticut, (2005-2010), (OPM, 2005)* as it would occur in a Regional Center. These areas are intended for activities that contribute to urban revitalization. The renovation of the existing Clinton Street Laboratory would not conflict with this goal.

Build New Laboratory Alternative

Under this alternative, a new SPHL would be constructed in a new location to include approximately 120,000 square feet of building, associated site improvements, and approximately 240 parking spaces. Constructing a new SPHL would provide state-of-the-art laboratories to support DPH's current programs, enable the SPHL to more adequately handle testing in support of public health emergencies, and would include adequate space to expand services in the future. This alternative was selected as the preferred alternative (Proposed Action) as it best meets the project purpose and need by:

- Allowing DPH to meet its mission for the SPHL both in the near and long term
- Providing space for all analytic areas on one floor
- Providing a facility configuration that supports state-of-the art laboratory equipment and analytic processes
- Providing for sufficient site security and buffer from adjoining land use
- Locating the Laboratory in a more suitable setting, more appropriately separated from intense human activity

No-Action Alternative

The No-Action Alternative would maintain operation and configuration of the current Clinton Street Laboratory and assumes essential repairs, upgrades, and maintenance to address fundamental safety, operational, and other limitations. The No-Action Alternative would not meet the purpose and need for the project. It would not accommodate modernization of Laboratory operations and acquisition and use of needed modern laboratory technology. As such, it would prohibit the SPHL from continuing to adequately fulfill its required functions in order to protect the public health. These factors lead to the conclusion that the No-Action Alternative is not a preferred alternative. Nonetheless, the potential impacts of the No-Action Alternative have been considered in comparison to the Proposed Action throughout this EIE.

2.2. ALTERNATIVE SITES CONTROLLED OR REASONABLY AVAILABLE

Controlled Sites

DPH does not have sites that are under its control (care and custody). The existing Clinton Street Laboratory site is under the control of DPW. However, irrespective of which agency has control of the Clinton site, as stated above, the No-Action and Renovation Alternatives are not feasible or practical. Therefore, the Clinton Street Laboratory site was eliminated from further consideration as an alternative site.

Reasonably Available Sites

As mentioned in the Background section of the Introduction, over the past several years, DPH considered numerous properties and they were eliminated for various reasons as viable sites. As a result, those sites are not considered reasonably available to DPH.

However, existing state-owned property in Rocky Hill was identified as a viable site by DPH and DPW. The site is under the care and custody of DEP and DVA and is located along West Street in Rocky Hill, Connecticut (Figure 2). DEP and DVA have no plans for use of their respective portions of the site and there are no known encumbrances or deed restrictions. Both DEP and DVA are amenable to transferring the care and custody of the required property to DPH for the Proposed Action. Therefore, this site (as well as the existing Clinton Street Laboratory) was considered a potential site during the CEPA public scoping process that was initiated on May 17, 2005.

Based on the foregoing circumstances associated with the site, comments received during the scoping process, and review of the siting criteria, the Rocky Hill site has been identified as being reasonably available to DPH and, based on the previously considered sites, this site is the only prudent and feasible location for the Proposed Action. Therefore, the Rocky Hill site for the Proposed Action is discussed in detail throughout this EIE.

<u>The Rocky Hill Site</u>

The Rocky Hill site is approximately 23 acres, encompassing the entire DEP parcel that is associated with Dinosaur State Park north of West Street (15.4 acres) and a small portion of the DVA property adjacent to the DEP parcel (7.6 acres).

Based on DEP records, the DEP parcel was originally acquired through the National Park Service's (NPS) Land and Water Conservation Fund (LWCF) in 1969 and was purchased from Gardner's Nurseries, Inc. The original parcel was approximately 22 acres; however, in 1974, approximately 6.8 acres were transferred to DVA. The portion of the DEP parcel that was transferred to DVA is part of the site under consideration.

The *Dinosaur State Park Master Plan* (DEP, 1967) identified the Gardner parcel as a potential location for visitor parking for the Park, indicating it was not envisioned to serve as an open space resource. Since the parcel was acquired, the 1967 plan has not been updated, DEP has no plans for future use of this parcel, the parcel has no recreational value, and it has remained inaccessible, undisturbed acreage for the past forty years. As documented in Section 3.10 *Flora/Fauna/Habitats/Threatened and Endangered Species*, this parcel does not have any significant plant populations and does not provide significant wildlife habitat. There is no evidence of occupation or use by any species of special concern. Therefore, it can be concluded that the subject DEP parcel does not have outstanding natural or recreational resource value nor is it needed for its originally intended purpose.

However, since the parcel is considered *de facto* parkland through its association with Dinosaur State Park, the parcel is designated as Existing Preserved Open Space according to the State's *Conservation and Development Policies Plan for Connecticut, 2005-2010* (OPM, 2005). Since it is a goal of the State to provide at least 21 percent of the State as open space, transferring the DEP parcel to DPH for the Proposed Action would serve short-term to the disadvantage of this long-term environmental goal. Therefore, mitigation is proposed to compensate for the acreage lost towards the State goal. Mitigation is discussed in further detail in Sections 3.2 and 6.

Transfer of care and custody of the site would occur after the OPM issues a determination of adequacy for the EIE and upon the successful completion of a LWCF conversion process that would compensate for the loss of open space.

3. EXISTING ENVIRONMENT AND IMPACT EVALUATION

3.1. LAND USE, ZONING AND LOCAL AND REGIONAL DEVELOPMENT PLANS

Existing Setting

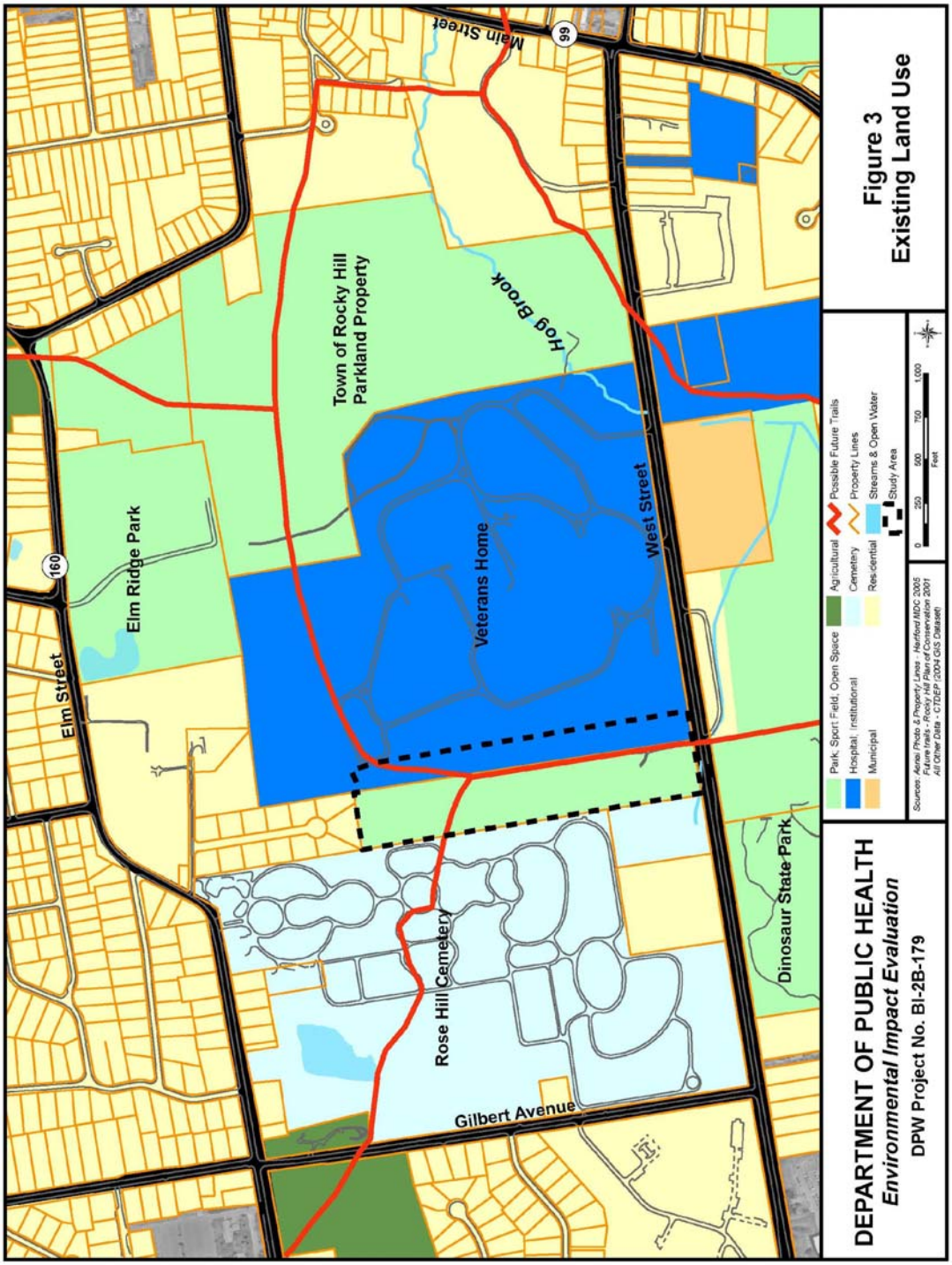
Land Use

The Rocky Hill Planning Office concludes (K. Ricci, personal communication, February 8, 2005) that, in general, the study area and its immediate surroundings are stable, long-existing land uses that are not anticipated to change substantially in the future. General land use is shown in Figure 3.

West Street (Vincent La Rosa Memorial Highway) – A large portion of the existing land on the north and south sides of West Street in the vicinity of the Proposed Action consists of state and municipal property. More specifically, the Rose Hill Memorial Park (cemetery), a portion of Dinosaur State Park, and the DVA Veterans' Home are located on the north side of West Street, while the bulk of Dinosaur State Park is located on the south side. West Street serves as the southern border of the site for the Proposed Action, which is undeveloped open space. Other land uses along West Street include a Connecticut Department of Transportation (ConnDOT) office/facility, a complex containing a National Guard/Reserve office, a state records center, a library for the blind/disabled, apartment complexes, and a nursing home/health care facility.

Elm Street and Gilbert Avenue – Elm Street serves as the northern boundary of the study area and borders Rose Hill Memorial Park and the municipal Elm Ridge Park. The cemetery sits between the site for the Proposed Action and Gilbert Street to the west. The municipal park includes ball fields, a basketball court, and playgrounds. A new amphitheater was recently completed in the park where the park and the DVA property boundaries meet. Most other existing land uses to the northern and west of the Proposed Action site are single-family homes and condominiums, including new residences and an active adult community that abut the site to the north.

Figure 3: Existing Land Use



Route 99 (Main Street) – Almost all of the existing land uses located on the east and west sides of Route 99 (between Elm Street and West Street) are residential and consist of several apartment and condominium complexes such as Prestige Apartments, Westage, and Rockwood Manor, as well as single-family homes.

Zoning

For the purposes of this evaluation, the study team consulted the *Town of Rocky Hill Zoning Ordinance* (Rocky Hill Planning and Zoning Commission, September 1, 1988).

The site for the Proposed Action falls within an R-20 residential zoning district with a half-acre minimum lot size. The intent of R-20 residential districts is to "permit a limited increase in density while maintaining an environment of high standards and to make it possible to program, install, and maintain public facilities in terms of need resulting from a defined intensity of land use".

Local and Regional Development Plans

The project study area falls within the planning regions addressed by *Rocky Hill 2001 Plan of Conservation and Development* (Rocky Hill Planning and Zoning Commission, September 2001) and by *Achieving the Balance: A Plan of Conservation and Development for the Capitol Region* (Capitol Region Council of Governments [CRCOG], 2003). These plans each articulate a vision, goals, and objectives for future land use and overall development within their respective planning regions. Relevant key elements of these reports are summarized below.

Rocky Hill 2001 Plan of Conservation and Development: This plan focuses on eight main issues or areas of policy for the future of Rocky Hill. Specific issue areas pertinent to the Proposed Action include traffic circulation in western Rocky Hill, natural resource conservation, and support for appropriate economic development. The plan articulates the following strategies to address these issue areas:

- Improving traffic flow on West Street including improvements to the intersection of West Street and Route 99
- Establishing greenways with trails, including possible future trail connections through the Proposed Action property (See Figure 3)
- Maximizing efficient and economic use of existing commercial, office, and industrial areas

The plan's Future Land Use Plan map envisions that the area of the Proposed Action will generally remain as it is today. The DEP parcel would remain as open space and the DVA property would remain in use for institutional purposes.

Capitol Region Plan of Conservation and Development (the CRCOG Plan): This plan establishes a future land use policy for the Capitol Region. Connecticut's Capitol Region

encompasses the City of Hartford and 28 surrounding suburban and rural communities, including Rocky Hill. The CRCOG Plan recommends a future development pattern guided by six major themes:

1. Focus new regional development in areas in which existing and planned infrastructure can support that development
2. Support efforts to strengthen and revitalize Hartford and support the revitalization of older, urbanized areas throughout the region
3. Develop in a manner that respects and preserves community character and key natural resources
4. Implement open space and natural resource protection plans that acknowledge and support the multi-town nature of natural systems
5. Support the creation of new employment, housing opportunities, and transportation choices, to meet the diverse needs of the region's citizens
6. Encourage regional cooperation in the protection of natural resources, the revitalization of urban areas, and economic development.

Direct and Indirect Impacts

Land Use

Impacts to land use are evaluated based on the effect that the Proposed Action will have on land use patterns, compatibility of land uses, encroachments on existing land use, and access to land as compared with the No-Action Alternative. The No-Action Alternative will constitute continuance of existing land use conditions.

The Proposed Action will not have any adverse direct or indirect effects on predominant land use patterns in the project vicinity and will not conflict with the mix of existing land uses there. It will be an institutional use with a moderate intensity of weekday activity compatible with the surrounding institutions. As the Proposed Action will not bring about new residential populations or substantially change economic conditions in the area, it is not anticipated to induce a significant intensification of development in any form. Since the Proposed Action will be a state facility confined to existing state property, it will not alter land use patterns or trends. However, as the Desired Open Space map contained in the Rocky Hill plan of development assumes the DEP property will remain as open space and shows access through it with a possible trail, the Proposed Action would have an adverse impact on envisioned future recreational land use.

Zoning

Generally, state and federal projects are exempt from local municipal zoning requirements. However, DPW strives for each of its projects to avoid conflict with local regulations. The Proposed Action will not conflict with existing zoning designations for this area of Rocky Hill. The proposed use is consistent with the types of uses allowed by site plan approval and/or Special Permit in the zone in which it will occur.

Consistency with Local and Regional Development Plans

Rocky Hill 2001 Plan of Conservation and Development: Specific issues with associated goals and objectives identified as relevant to the Proposed Action include traffic circulation in western Rocky Hill, support for appropriate economic development, and establishing open space greenbelts and trails. Chapter 17 of the plan prioritizes recommended strategies to implement the plan's goals and objectives. The traffic analysis conducted for this EIE concluded that the Proposed Action will have minimal adverse effects on traffic flow on West Street. It will not conflict with either the transportation goals or implementation strategies expressed in the plan. The Proposed Action also does not conflict with economic development goals or implementation strategies expressed in the plan.

The Proposed Action would conflict with the possible trail development as shown on the Desired Open Space map contained within the plan. However, the highest priority for trails and greenways as expressed in Chapter 17 of the plan is to focus on river-related open space and a "riverway" trail as opposed to other trails elsewhere in Rocky Hill. The plan does recommend establishing a series of trails connected in an integrated system established through a detailed trails planning study for the town versus pursuing the tentative conceptual trail system shown on the Desired Open Space map. The trail as shown in the plan is theoretical and one of several available options for trail locations for this geographic area of the Town. Consequently, the possible trail through the site for the Proposed Action can be understood as a preliminary concept only, for which practical feasibility is unknown and which warrants further study in the context of a future town-wide trail system study.

Capitol Region Plan of Conservation and Development: The Proposed Action would not conflict with any of the policies expressed in the CRCOG plan and is consistent with the future land use plan envisioned for the region.

Proposed Mitigation

Land Use and Zoning

As no significant adverse impacts on land use or zoning are anticipated, no mitigation is proposed.

Consistency with Local and Regional Development Plans

As no significant adverse impacts on local and regional consistency are anticipated, no mitigation is proposed

3.2. CONSISTENCY WITH STATE PLAN OF CONSERVATION AND DEVELOPMENT

Existing Setting

The *Conservation and Development Policies Plan for Connecticut (2005-2010), (OPM, 2005),* (the C&D Plan) contains growth management, economic, environmental quality, and public service infrastructure guidelines and goals for the State of Connecticut. The overall strategy of the Plan is to reinforce and conserve existing urban areas, to promote staged, appropriate, sustainable development, and to preserve areas of significant environmental value. The Locational Guide Map which accompanies the Recommended Plan provides a geographical interpretation of the State's conservation and development policies.

According to the 2005-2010 Locational Guide Map, the general vicinity of the Proposed Action in Rocky Hill falls within a Neighborhood Conservation Area. However, because a portion of the site for the Proposed Action is currently DEP property, it is designated as Existing Preserved Open Space.

These two designations and associated action strategies are defined as follows:

Neighborhood Conservation Areas – Represents areas that are typically characterized by lands without the high incidence of structural, occupancy, and income characteristics of Regional Centers, yet are significantly built-up and well populated. These areas generally reflect stable, developed neighborhoods and communities and are often contiguous to Regional Centers.

> State Action Strategy: Support the maintenance of stable developed neighborhoods and communities as well as the intensification of development when supportive of community stability and consistent with the capacity of urban services.

Existing Preserved Open Space – Represents areas in the state with the highest priority for conservation and permanent use as open space

> State Action Strategy: Support the permanent continuation of these lands as public or quasi-public open space, and discourage their sale and development except as may be consistent with the open space functions served.

The C&D Plan also contains six broad growth management principles and related policies to guide future development. Those pertinent to the Proposed Action include:

- Principle – Concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options.

  Policy: Encourage energy-efficient patterns of development such as revitalized Regional Centers, higher densities around public transportation nodes and along

corridors, and planned mixed-use development that provide convenient access to transit and enable more opportunities for bicycling and walking.

- Principle – Conserve and restore the natural environment, cultural and historical resources, and traditional rural lands

  Policy: Continue to protect Existing Preserved Open Space areas and to limit improvements to those consistent with long-term preservation and appropriate public enjoyment of the natural resource and open space values of the site.

  Policy: Approve actions not consistent with long-term preservation only when it is demonstrated that there are overriding social, economic, and public benefits and there are no feasible alternatives.

Consistency

The Proposed Action is consistent with the general policies and strategies for Neighborhood Conservation Areas with the exception of the specific site for the Proposed Action itself. The state policy for land use abutting and surrounding the site is for intensification of sustainable development over time that strengthens community stability, preserves community character, and is consistent with the capacity of urban services. The Proposed Action meets these criteria. It will be complementary to the character of the surrounding area of low density, mixed uses which include several state and institutional facilities. The site for the Proposed Action is designated for a combination of open space and institutional use in the local plan of development, and will have direct access to supporting infrastructure. The Proposed Action, located within one mile of Interstate 91 and State Routes 99 and 3, also meets the principle of concentrating development along major transportation corridors. The development of the Proposed Action in this location in Rocky Hill would thereby be consistent with the desired overall direction of area-wide development.

The Proposed Action does however, conflict with the principles, policies, and strategies for Preserved Open Space, which apply to the current DEP-managed portion of the Proposed Action site. Therefore, the use of this site and permanent loss of this preserved open space must be justified by an overriding social, economic, or public benefit. Public benefit is clearly defined as a fundamental purpose for the Proposed Action. The SPHL provides essential services necessary to protect public health in Connecticut, including testing in support of the safe drinking water program, early detection of genetic/metabolic disorders in newborns and childhood lead poisoning, and monitoring diseases such as West Nile virus and influenza. This promotes a social benefit as well. The SPHL also provides economic benefit to the State by providing support to the private health care industry, including private clinical laboratories, and by helping to ensure health and safety standards are met by businesses operating in Connecticut.

The discussion in *Sections 2.1 and 2.2, Alternatives Actions and Sites* demonstrated that there are no prudent or feasible alternative sites for the Proposed Action which are available to, or

under the control of, DPH or DPW. The functions performed by the SPHL cannot continue to be adequately performed in the existing facility in Hartford, even with renovations and upgrades. Thus, there is an overriding need for the Proposed Action on the Rocky Hill site to provide an ongoing public benefit.

The subject property has limited natural resource and open space values. These specific characteristics are the object of the policy expressed in the C&D Plan for protection of Existing Preserved Open Space. This parcel is not presently open to the public as a natural area, recreational site, or as a contributing part of Dinosaur State Park.

The *Dinosaur State Park Master Plan*, (DEP, 1967) calls for potential future use of the proposed site for additional visitor parking, indicating it was not envisioned as an open space resource. That 1967 plan has not been updated, DEP has not documented any plans for the future use of this parcel, and it has remained inaccessible, undisturbed acreage for the past forty years. In addition, as documented in *Section 3.10, Flora/Fauna/Habitats/ Threatened and Endangered Species*, this parcel does not have any significant plant populations and does not provide significant wildlife habitat or have evidence of occupation or use by any species of special concern. It can be concluded, therefore, that it does not have outstanding natural resource values, is not needed for its original purpose, which was as a parking area for Dinosaur State Park, nor will it be used for that intended purpose in the future.

The subject parcel also has not, throughout its history of DEP ownership, been utilized for recreation. The policy for Preserved Open Space expressed in the C&D Plan states this as a key purpose of such lands. It calls for Preserved Open Space that provides high quality outdoor recreational opportunities that broaden understanding of and contact with the natural environment. This parcel was never planned for a state recreational use and has never been accessible for this purpose. As a result, DEP has determined that the subject parcel is no longer needed and is committed to transferring the custody and control of the parcel to DPH for this Proposed Action.

However, despite DEP's willingness to transfer the parcel, the parcel was acquired with grant funds through the LWCF and it is a goal of the State to provide at least 21 percent of state land as open space. Consequently, transferring the DEP parcel to DPH for the Proposed Action would act in the short term to the disadvantage of this long-term environmental goal. Furthermore, the LWCF program requires that: "No property acquired or developed with assistance under this section [6(f)(3) of the LWCF Act] shall, without the approval of the Secretary [of the Interior, acting through the Director of the NPS], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location…" In order to mitigate the loss of open space and comply with the LWCF Act, DEP's Bureau of Outdoor Recreation will initiate and complete the "conversion" process. Through this process, DEP will identify a substitute property through the Recreation and Natural Heritage Trust program to mitigate this loss of designated open space.

Upon submission of the required documentation by DEP to NPS to amend the initial grant agreement for acquisition of the subject parcel and acceptance of the conversion proposal by NPS, the substitute property can be acquired by DEP. A map of the acquired property is required to identify the replacement property as dedicated to public outdoor recreation. Upon approval of the conversion by NPS, DEP can transfer custody and control of the Rocky Hill parcel to DPH.

3.3. TRAFFIC AND PARKING

This section describes existing traffic and parking conditions in the study area and the potential traffic and parking impacts associated with the proposed SPHL.

Existing Setting

The primary highways and access to the proposed Laboratory include I-91, Route 3 (Cromwell Avenue), Route 99 (Main Street), and West Street. Exit 23 provides full access on and off I-91 northbound and southbound, via West Street. West Street is characterized as an east-west arterial that provides two lanes of travel in each direction. West Street also serves as the major access to and from I-91 and the local streets in the study area. Route 3 and Route 99 are major arterials with a north/south orientation and provide access for commuters and residents to and from the study area. The posted speed limit along the major arterials ranges from 40 to 45 miles per hour (mph). The roadway transportation system in the vicinity of the proposed SPHL is illustrated in Figure 4.

Traffic Flow and Operations

An evaluation of intersections that would likely be impacted most by the Proposed Action was conducted. The eight study intersections are all signalized and are listed below. They are identified in Figure 4.

1. West Street at Route 3 (Cromwell Avenue)
2. West Street at Corporate Place
3. West Street at I-91 Southbound (SB) Ramps
4. West Street at I-91 Northbound (NB) Ramps
5. West Street at Capital Boulevard
6. West Street at Gilbert Avenue
7. West Street at Veterans' Administration Site Entrance
8. West Street/Forest Street at Route 99 (Main Street)

Existing turning movement count data were collected in February 2005, for the morning (7:00 AM – 9:00 AM) and afternoon (4:00 PM – 6:00 PM) peak travel periods. All traffic counts were collected under typical weekday conditions. In general, the peak hours were observed between 7:15 AM - 8:15 AM and 4:45 PM - 5:45 PM. Existing traffic counts are provided in

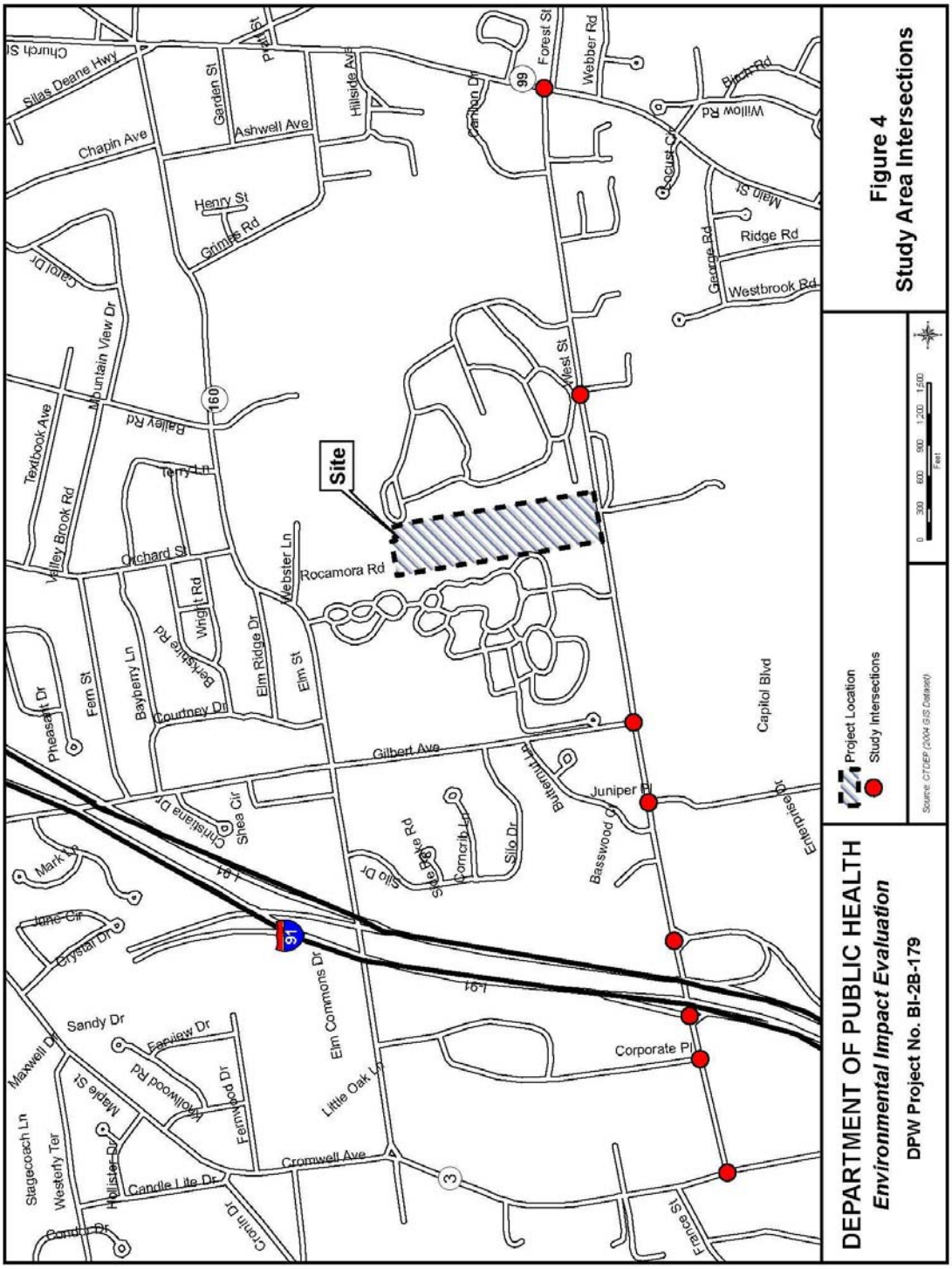
Appendix C. Signal phasing and timing data were obtained from ConnDOT and were utilized for the operational evaluation of the study intersections.

A Level-of-Service (LOS) analysis was conducted for all the study intersections using the Highway Capacity Software (version 4.1), which implements procedures presented in the *Highway Capacity Manual 2000* (Transportation Research Board). LOS is a measure of the delay experienced by vehicles at an intersection and is used to describe the operation of signalized intersections. It is expressed in an alphabetic scale, A to F. LOS A represents clear traffic flow and the best conditions. LOS F represents severely congested flow and is considered unacceptable. Intersections with long delay times at LOS E or F are least acceptable to most drivers and can be considered "failing" in terms of traffic operations.

Results from the LOS analysis for the study area intersections indicate that two of the eight signalized intersections operate at failing levels of service under existing conditions. These intersections include:

- *West Street at I-91 NB Ramps*: Operates at LOS F during the AM peak hour
- *West Street at Route 99*: Operates at LOS F during the AM and PM peak hours

Figure 4: Study Area Intersections



Four of the intersections were identified as locations with one or more critical movements currently operating at poor levels of service (LOS E or F) during the AM or PM peak hour. The intersections and relevant critical movements are listed below:

- *West Street at Route 3 (Cromwell Avenue)* - The westbound right-turn movement operates at a LOS F during the PM peak hour.

- *West Street at I-91 SB Ramps* -The eastbound thru movement operates at a LOS E during the PM peak hour. The southbound right-turn movement operates at a LOS E during the PM peak hour.

- *West Street at I-91 NB Ramps* - The intersection as a whole operates at LOS F during the AM peak hour. The northbound left and right-turn movements operate at LOS F during the PM peak hour.

- *West Street at Route 99 (Main Street)* - The intersection as a whole operates at LOS F during both peak hours. The northbound shared left-thru-right turn movement operates at LOS F during the AM peak hour and the PM peak hour. The southbound shared left-thru-right turn movement operates at LOS F during the PM peak hour.

Traffic operations in the study area between the I-91 NB ramps and the proposed site operate at LOS A or B. However, during the morning and evening commute, congestion occurs on West Street at intersections from the I-91 NB ramps to Route 3, resulting in operational deficiencies as commuters travel to and from I-91 to Route 3.

The intersection of Route 99 with West Street operates with an unacceptable LOS during the AM and PM peak hours. The intersection is configured such that Forest Street is offset from Route 99 at West Street. Due to this configuration, the traffic signal at the intersection has three phases, one for each of the three streets. This limits the available green time for the northbound and southbound movements on Route 99, resulting in long delays.
Table 1 summarizes the intersection LOS for the AM and PM peak hours.

Table 1: Level-of-Service Analysis Summary, Existing Conditions (2005)

Intersection	Overall Intersection Level-of-Service	
	AM Peak Hour	PM Peak Hour
West Street at Route 3	C	D[1]
West Street at Corporate Place	A	B
West Street at I91 SB Ramps	C	C[2]
West Street at I91 NB Ramps	F[3]	D[3]
West Street at Capital Boulevard	A	B
West Street at Gilbert Avenue	B	A
West Street at Veterans' Administration Site Entrance	B	B
West Street at Route 99	F[4]	F[4]

Source: Fitzgerald & Halliday, Inc., February 2005

[1]The westbound right-turn movement operates at LOS F during the PM peak hour.

[2]The eastbound thru movement and southbound right-turn movement operate at LOS E during the PM peak hour.

[3]The northbound left and right-turn movements operate at LOS F during the AM peak hour as well as LOS F during the PM peak hour.

[4]The northbound shared left-thru-right turn movement operates at LOS F during the AM and the PM peak hours. The southbound shared left-thru-right turn movement operates at LOS F during the PM peak hour.

Transit Service and Operation

Connecticut Transit (CT Transit) provides one local and one express public transit service to the study area. These routes are listed below:

- Route T1 (Rose Hill) provides service on West Street with two buses each weekday. This route provides service from Rocky Hill to Hartford on weekdays from 6:00 AM to 6:30 PM, with continuing service to Newington.

- Route 10 (Century Hills Express) provides express service only on weekdays between Rocky Hill and Hartford. Service to Hartford picks up passengers twice along West Street around 6:45 AM and 7:45 AM and returns in the afternoon around 4:30 PM and 5:30 PM.

- Two north/south routes, U7 (Middletown via Silas Deane Highway) and U8 (Middletown via Maple Street), provide weekday and Saturday service along Route 99, less than ½ mile from the project site.

The Rocky Hill Human Services Department provides mini-bus paratransit services to senior citizens and disabled residents in need of transportation. The bus operates from 8 AM to 4 PM from Monday to Friday and on Sundays before and after morning church services. The bus takes various routes each day and rides can be arranged with 24-hour notice.

Parking

The existing Clinton Street Laboratory provides 92 parking spaces. Based on the current demand for parking, this is inadequate to meet staff and visitor needs, including couriers. There are no other nearby parking facilities with adequate available space to conveniently meet the parking shortfall. There is no parking at the proposed site as it is presently undeveloped.

Pedestrian and Bicycle Facilities

Sidewalks are present along the north side of West Street from the existing DVA campus to Route 99. Sidewalks and crosswalks are provided at the intersections of West Street with Route 3 and Route 99. There are no bicycle facilities within the study area.

Crash Summary

Crash data were obtained from ConnDOT for a three-year period from January 1, 2001 to December 31, 2003. A total of 94 accidents took place in the study area during this time, with 37 of the accidents resulting in injuries. There were no crashes resulting in fatalities or involving pedestrians. Based on this accident data, there does not appear to be an existing high accident location or pattern of correctable accident occurrence in the study area (See crash data by intersection in Appendix C).

Direct and Indirect Impacts

Traffic Impacts

In order to estimate traffic impacts from the Proposed Action, traffic flow and operations were evaluated for the future year 2009, the year the SPHL is anticipated to be in operation. Background traffic growth, roadway improvements, and trips generated by the proposed development were estimated in order to project future traffic volumes (See traffic projections in Appendix C). Background traffic growth was assumed to occur at 2 percent per year, based on data for growth rates obtained from recent traffic studies conducted for Rocky Hill.

Officials from the Town of Rocky Hill and the State Traffic Commission indicated that there are two planned and/or programmed developments that will particularly impact travel demand or patterns within the study area. The Marriott Hotel development, which is located north of the intersection of West Street with Route 3, is currently under construction. It will have one access driveway on Route 3 and another on Corporate Place. The Shunpike Plaza

development is another planned development along Route 3 which will locate its main entrance at the intersection of West Street with Route 3.

Future (2009) traffic operations were evaluated for the No-Action Alternative. In general, an intersection having a poor LOS under existing conditions will continue to function poorly or will deteriorate further, if additional demand is added and if no improvements are made. Based on traffic projections and programmed developments, results from the No-Action Alternative analysis indicate that three intersections (one more than under Existing Conditions) are expected to operate at failing levels of service. These intersections include:

- West Street at Route 3: Will operate at LOS F during the AM and PM peak hours
- West Street at I-91 NB Ramps: Will operate at LOS F during the AM peak hour and LOS E during the PM peak hour
- West Street at Route 99: Will operate at LOS F during the AM and PM peak hours

Four of the eight study intersections will also continue to have certain individual movements operating at LOS E or LOS F. Table 2 summarizes the future intersection LOS for the AM and PM peak hours for the No-Action Alternative.

To evaluate future (2009) traffic flow conditions for the Proposed Action, the change in traffic volumes and LOS from the No-Action Alternative to the Proposed Action conditions must be determined. Trips generated by the Proposed Action were estimated based on the projected number of employees at the Public Health Laboratory. Based on current operations and employee activity obtained from the Laboratory's Director, it is anticipated that there will be 128 employees in the year 2009. Employees will arrive in the morning between 7:00 AM and 9:00 AM and leave for the evening between 3:00 PM and 6:00 PM. For a conservative analysis, it is assumed that all employees will drive alone and will arrive and leave during the peak hour. Table 3 shows a summary of the estimated site-generated trips for the morning and evening peak hour. As shown, it is estimated that 128 new trips will enter the site in the morning and exit the site in the evening peak hours. Other trips to and from the Proposed Action will be limited in number and spread out throughout the day, primarily during non-peak travel periods.

Table 2: Future Level-of-Service Analysis Summary, No-Action Alternative (2009)

	Overall Intersection Level-of-Service			
	Existing Condition		No-Action Alternative	
Intersection	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
West Street at Route 3	C	D	F[1]	F[1]
West Street at Corporate Place	A	B	A	B
West Street at I91 SB Ramps	C	C	C[2]	D[2]
West Street at I91 NB Ramps	F	D	F[3]	E[3]
West Street at Capital Boulevard	A	B	A	B
West Street at Gilbert Avenue	B	A	B	A
West Street at Veterans' Administration Site Entrance	B	B	B	B
West Street at Route 99	F	F	F[4]	F[4]

Source: Fitzgerald & Halliday, Inc., July 2005

[1]The eastbound left-turn movement operates at LOS E during the AM peak hour. The eastbound shared thru-right turn lane operates at LOS F during the AM peak hour. The westbound left-turn movement operates at LOS F during both peak hours. The northbound shared left-thru movement operates at LOS F during the AM peak hour and at LOS E during the PM peak hour. The northbound right-turn lane operates at LOS F during both peak hours. The southbound left-turn movement operates at LOS F during the AM peak hour.

[2]The westbound left-turn movement operates at LOS E during the AM peak hour. The eastbound thru movement and southbound right-turn movement operates at LOS F during the PM peak hour.

[3]The eastbound thru movement operates at LOS F during the AM peak hour. The northbound shared left-right turn movement operates at LOS F during the AM peak hour as well as LOS F during the PM peak hour.

[4]The northbound shared left-thru-right turn movement operates at LOS F during the AM and the PM peak hours. The southbound shared left-thru-right turn movement operates at LOS F during the PM peak hour.

Table 3: Trip Generation Summary AM and PM Peak Hours

	Vehicle Trips (vph)		
Time Period	**Enter**	**Exit**	**Total**
AM Peak Hour	128	0	128
PM Peak Hour	0	128	128

Source: Fitzgerald and Halliday, Inc., May, 2005.

To determine the trip distribution patterns, towns in which the employees live were obtained. Site access routes were assigned based on the location of the town with respect to the proposed site. Table 4 shows the trip distribution summary.

Table 4: Trip Distribution Summary

Direction	**Percent of Distribution (%)**
To/From Route 3 SB	2%
To/From I91 SB	68%
To/From I91 NB	28%
To/From Route 99 SB	1%
To/From Route 99 NB	1%
Total	**100%**

Source: Fitzgerald & Halliday, Inc. May 2005

Trips generated by the Proposed Action were added to the 2009 No-Action Alternative traffic volumes to establish the 2009 Proposed Action traffic volumes (shown in Appendix C).

Results from the LOS analysis under the 2009 Proposed Action are reported in Table 5. As shown, no additional intersections are expected to operate at failing LOS as a result of the Proposed Action and no intersections are expected to have declining LOS as a result of the Proposed Action, compared to the 2009 No-Action scenario.

Table 5: Future Level-of-Service Analysis Summary, Proposed Action (2009)

	Overall Intersection Level-of-Service			
	No-Action Alternative		Proposed Action	
Intersection	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
West Street at Route 3	F	F	F[1]	F[1]
West Street at Corporate Place	A	B	A	B
West Street at I91 SB Ramps	C	D	C[2]	D[2]
West Street at I91 NB Ramps	F	E	F[3]	E[3]
West Street at Capital Boulevard	A	B	A	B
West Street at Gilbert Avenue	B	A	B	A
West Street at Veterans' Administration Site Entrance	B	B	B	B
West Street at Route 99	F	F	F[4]	F[4]

Source: Fitzgerald & Halliday, Inc., July 2005

[1]The eastbound left-turn movement operates at LOS E during the AM peak hour. The eastbound shared thru-right turn lane operates at LOS F during the AM peak hour. The westbound left-turn movement operates at LOS F during both peak hours. The northbound shared left-thru movement operates at LOS F during the AM peak hour and at LOS E during the PM peak hour. The northbound right-turn lane operates at LOS F during both peak hours. The southbound left-turn movement operates at LOS F during the AM peak hour.

[2]The westbound left-turn movement operates at LOS E during the AM peak hour. The eastbound thru movement and southbound right-turn movement operate at LOS F during the PM peak hour.

[3]The eastbound thru movement operates at LOS F during the AM peak hour. The northbound shared left-right turn movement operates at LOS F during the AM and PM peak hour.

[4]The northbound shared left-thru-right turn movement operates at LOS F during the AM and the PM peak hours. The southbound shared left-thru-right turn movement operates at LOS F during the PM peak hour.

Traffic Operations Summary: Under existing conditions, two study intersections operate poorly (LOS E or LOS F) and four intersections operate with critical movements operating at a poor LOS. Under future conditions, three intersections (one more than under Existing Conditions) are anticipated to operate poorly if no improvements are made. However, future intersection Level of Service will be the same under the No-Action Alternative and the Proposed Action, indicating that no adverse impacts are expected as a result of the Proposed Action.

Under the Proposed Action, a total of 240 parking spaces will be provided on site. Vehicular access to the on-site parking will be from West Street.

Proposed Mitigation

No adverse traffic impacts are anticipated from the Proposed Action. Consequently, no mitigation is proposed.

3.4. AIR QUALITY

Existing Setting

The Clean Air Act of 1970 and subsequent Clean Air Act Amendments established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants to ensure the protection of human health and public welfare. NAAQS were established for carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), ozone (O_3), and particulate matter (PM). The Clean Air Act also required states to monitor air quality to determine if regions meet the NAAQS. If a region shows exceedances of any of the NAAQS, that part of the state is classified as non-attainment for that pollutant and the state must develop an air quality plan, called a State Implementation Plan (SIP), to bring that area into compliance.

According to the US Environmental Protection Agency's *2004 Annual Report on Air Quality in New England* (EPA, 2005), the current air quality attainment designations for the six criteria pollutants in Hartford County are:

CO: The Hartford region and the entire State of Connecticut are designated as attainment for CO. The Hartford region was officially redesignated to attainment on January 2, 1996. Prior to that time, the region was a CO non-attainment area. CO emissions controls implemented in the region have reduced CO emissions to acceptable levels.

O_3: The entire State of Connecticut is designated as non-attainment for the 1-hour ozone standard. The Hartford region is classified as "serious non-attainment" for the 1-hour standard. As of June 2005, EPA revoked the 1-hour standard for ozone; however, the regulations that Connecticut adopted for the standard are still being enforced by DEP.

In July of 1997, EPA promulgated a revised ozone standard, which is based on an 8-hour averaging period. On April 15, 2004 EPA designated the entire State of Connecticut as a "moderate non-attainment" area for the 8-hour ozone standard. Connecticut has until June 2007 to submit a State Implementation Plan (SIP) to the EPA which will detail the actions that Connecticut will take to bring the State into compliance with the 8-hour standard by June 2010.

PM: EPA has established NAAQS for two size ranges of PM. On April 5, 2006, designations under the national air quality standards for fine particle pollution or $PM_{2.5}$ became effective. The Hartford region is currently in attainment of PM_{10} (particulate matter with a diameter of 10 microns or less) and $PM_{2.5}$ (particulate matter with a diameter of 2.5 microns or less). Currently, Connecticut $PM_{2.5}$ monitors measure levels below the $PM_{2.5}$ standard and CTDEP is in the process of drafting a $PM_{2.5}$ State Implementation Plan (SIP) to address Connecticut's contribution to the nonattainment status of New York City.

NO_2: The entire State of Connecticut is in attainment for NO_2.

Pb: The entire State of Connecticut is in attainment for Pb.

SO_2: The entire State of Connecticut is in attainment for SO_2.

For transportation projects, the criteria pollutants of greatest concern are CO and ozone. The NAAQS for CO are a 1-hour average concentration of 35 parts per million (ppm) and an 8-hour average concentration of 9 ppm. The NAAQS for ozone are a 1-hour average of 0.12 ppm and an 8-hour average concentration of 0.08 ppm.

Monitoring

Monitored air quality data are documented and reported by DEP to the EPA. The most recent published report is the *2004 Annual Report on Air Quality in New England* (EPA Region 1, August 2005). Data collected at the monitoring sites help establish background air quality levels.

Carbon Monoxide

CO is the most important transportation-related pollutant of concern at the local level. CO is a colorless, odorless gas formed from incomplete combustion of carbon-containing fuels and from oxidation of hydrocarbons in the atmosphere. CO does not persist in the atmosphere; it is converted by natural processes to carbon dioxide, and this is done quickly enough to prevent any general buildup. However, CO can potentially reach dangerous levels in local areas, such as city-street canyons with heavy auto traffic and little wind. These are called CO hotspots. DEP locates CO monitors throughout the state specifically to measure CO levels from high traffic areas in populated locations.

EPA's air quality summary demonstrates that CO concentrations are not problematic in the Hartford region. Specifically:

- Since 1975, ambient levels of carbon monoxide statewide have decreased by 66%.
- The primary 8-hour standard of 9 ppm was not exceeded at any of the CO monitoring sites in Connecticut during 2004. In addition, there were no exceedances of the primary 1-hour standard of 35 ppm at any site.
- At the two CO monitors in the Hartford area, the maximum average 8-hour CO concentrations were 2.0 ppm and 5.7 ppm, well below the 8-hour standard of 9 ppm.

The maximum 1-hour average concentrations were 2.4 and 12.5 ppm, well below the 1-hour standard of 35 ppm.

- Using 36-month averaging periods, DEP has shown that CO levels are trending downward at all the sites in the state.
- The last measured CO exceedance in Connecticut occurred in 1995.

Ozone

O_3 is a gas with a faintly bluish color. At high concentrations, it irritates the mucous membranes of the respiratory system and can cause impaired lung function. Ozone is a highly reactive form of oxygen and the principal component of smog. It is not emitted into the air directly, but rather formed by chemical reactions in the air from two other pollutants: volatile organic compounds (VOC) and nitrogen oxides (NOx). Energy from sunlight is needed for these chemical reactions. This accounts for the daily variation in ozone levels, which increase during the day and decrease at night. In addition to transportation sources, VOC and NOx are emitted from numerous large and small sources such as pesticides, paints, and electrical utilities.

A large percentage of the peak ozone concentrations in Connecticut are caused by the transport of ozone and/or precursors (i.e., VOC or NOx) from the New York City area and from other points west and south of Connecticut. The highest ozone levels in Connecticut occur on days with persistent winds out of the southwest. During the summer, these winds are usually accompanied by high temperatures and bright sunshine, which are important to the production of ozone. It is the combination of these factors that often produces unhealthful ozone levels in Connecticut.

EPA's air quality summary documents ozone concentrations in the Hartford region:

- Since 1975, ambient levels of ozone statewide have decreased by 60%.
- Hartford's ozone monitor exceeded the 8- hour ozone NAAQS on two days in 2004.

DEP issued a Mid-Course Review of progress towards attainment of the 1-hour ozone standard in Connecticut on January 10, 2005, concluding that Connecticut's and other states' strategies are resulting in emissions reductions and air quality improvements needed to attain the 1-hour ozone standard by November 2007.

Direct and Indirect Impacts

Mobile sources

Since there is currently no facility at the location, there are no additional anticipated mobile sources of air emissions under the No-Action Alternative. Furthermore, the mobile sources associated with the existing facility in Hartford are not anticipated to increase air emissions since the operations at this location would be status-quo.

For traffic-generating projects, the criteria pollutants of primary concern are CO and O_3. The NAAQS for CO are a 1-hour average concentration of 35 ppm and an 8-hour average concentration of 9 ppm. The NAAQS for O_3 are a 1-hour average of 0.12 ppm and an 8-hour average of 0.08 ppm. Emissions of PM_{10} and $PM_{2.5}$ are also potential concerns, particularly from diesel engines.

Trip generation, as described in more detail in *Section 3.3 Traffic and Parking*, will not have any significant adverse impact on traffic operations on West Street. The SPHL is not anticipated to be a substantial traffic generator; therefore, it is not anticipated to be a generator of traffic-related air pollutants. Based on this fact, and on existing air quality conditions in the region, air quality impacts from mobile sources related to the project are anticipated to be minimal.

Air quality monitoring data show that existing CO levels in the area are already well below the CO NAAQS. The traffic analysis shows that, in general, the studied intersections under the Proposed Action will continue to operate at virtually the same LOS as the future No-Action Alternative, and therefore CO and O_3 hotspots caused by idling and slow-moving vehicles are unlikely as a consequence of the Proposed Action. Lastly, the comparatively low level of trips generated by the proposed development relative to total regional trips is unlikely to negatively impact regional air quality. The CRCOG Conformity Analysis shows that VOC, NOx, and CO emissions from the transportation system are currently below those allowed by DEP (emission budgets). Thus, the effects of increased travel brought about by the facility, which is anticipated to be minimal, can be readily accommodated without causing the emission budgets to be exceeded and as a result, will not cause or contribute to potential future violations of the NAAQS.

Stationary sources

Since there is currently no facility at the location, there are no anticipated stationary sources of air emissions under the No-Action Alternative. Furthermore, the stationary sources associated with the existing facility in Hartford are not anticipated to increase air emissions since the operations at this location would be status-quo.

The existing SPHL does generate some exhaust emissions from stationary sources, including treated emissions collected via fume hoods in the analytic areas. However, prior to discharge, exhaust from fume hoods passes through scrubbers to remove the vast majority of chemicals, and emissions are well below the level that requires a stationary air source permit from DEP. Anticipated stationary sources of air emissions at the proposed new Laboratory will include the same sources as the current facility and may also include boilers and emergency generators. The current SHPL facility in Hartford is not presently required to file any permits pertaining to air quality and it is not anticipated that there will be any permits required for the proposed facility. Handling of air emissions at the new facility will be the same as that for the existing Laboratory and will conform to all state and federal requirements.

Proposed Mitigation

It is not anticipated that any short or long-term adverse air quality impacts from motor vehicles will occur as a result of the Proposed Action. Therefore, no traffic-related air quality mitigation measures will be required. Additionally, it is not anticipated that there will be any adverse air quality impacts from stationary sources.

3.5. NOISE

Existing Setting

Noise-sensitive land uses include: a) residences, hotels, and other buildings where people sleep; b) institutional resources such as churches, schools, hospitals, and libraries; and c) various tracts of land where quiet is an essential element of the land's intended purpose, such as a National Historic Landmark where outdoor interpretation routinely takes place.

A site visit was conducted to identify noise-sensitive land uses in the project vicinity and to obtain a better understanding of the existing noise environment. The project site is in suburban Rocky Hill amidst primarily residential and institutional land uses. Immediately east of the site is the DVA campus, which includes a health care facility, veterans' housing, and numerous other administrative and support buildings. To the west is Rose Hill Cemetery, and to the north is a residential neighborhood. To the northeast is Elm Ridge Park, a town-owned recreational facility. The southern side of the site is bounded by West Street. Just south of West Street is Dinosaur State Park. An office park and hotel are located about a quarter-mile west of the proposed site, just east of Interstate 91.

Of these land uses, the residential homes located to the north of the site, the Veterans' Home to the east, Rose Hill Cemetery to the west and Dinosaur State Park to the south are considered noise-sensitive land uses. There are no other noise-sensitive land uses proximate to the proposed site.

Existing 2005 noise levels have not been measured for this document and no prior studies quantifying existing noise levels are known to exist for the project study area. Despite the lack of quantitative noise data for the project site, suburban environments are generally considered moderately noisy places, with noise predominantly generated by traffic on local streets and nearby highways. Noise levels within suburban environments typically range from 55 dBA (A-weighted decibels) to 60 dBA (*Transit Noise and Vibration Impact Assessment*, DOT-T-95-16, April 1995). Existing noise levels in suburban Rocky Hill are anticipated to fall within this decibel range.

Direct and Indirect Impacts

The No-Action Alternative represents no change to the existing noise environment at the proposed site, which is currently undeveloped, and would have no adverse noise effects.

Primary sources of noise from the new SPHL will be from motor vehicle traffic, truck deliveries, and from stationary mechanical equipment such as HVAC equipment and air scrubbers. Most of the mechanical equipment will be located on the second floor of the new facility and will be internal to the building, and therefore acoustically enclosed. The HVAC and exhaust fans, however, will most likely be located on the roof. Rooftop HVAC equipment generally produces a sound pressure level of approximately 63 dBA at a point 50 feet from the equipment (*Transit Noise and Vibration Impact Assessment*, DOT-T-95-16, April, 1995). In general, the rule of thumb for noise propagation is to reduce the noise level by 6 dBA for each doubling of distance. Thus, at 100 feet, the rooftop HVAC equipment will have a noise level of approximately 57 dBA and at 200 feet the noise level would be approximately 51 dBA. Since the nearest noise-sensitive land use (the Veterans' Home) is located approximately 200 feet from the proposed Laboratory, noise from the HVAC equipment would be on the order of 51 dBA. In addition, the Proposed Action will be constructed utilizing DPW specifications for noise generating equipment and, as such, noise generation from stationary sources will be minimized.

A second source of noise introduced into the environment will be that generated by vehicles coming to and from the new Laboratory. According to the traffic analysis, there will be approximately 256 additional vehicles per day traveling along West Street as a result of the Proposed Action. This corresponds to roughly 100 additional vehicles per peak hour of travel over existing conditions. As a comparison, 100 vehicles per hour at 40 miles per hour produces a sound pressure level of 55 dBA and 1,000 vehicles per hour at 40 miles per hour produces a sound pressure level of 65 dBA (*Transit Noise and Vibration Impact Assessment*, DOT-T-95-16, April, 1995). Thus, it takes a 10-fold increase in vehicles to produce a 10 dBA increase in noise levels. Therefore, it is concluded that the small increase in daily traffic resulting from the Proposed Action will not result in a perceptible increase in noise levels in the surrounding environment. For this reason, and based on the HVAC noise discussion in the previous paragraph, it is anticipated that noise levels in the project vicinity will continue to remain within the 55 dBA to 60 dBA range typical of a suburban environment.

Noise impacts from the Proposed Action will be most noticeable during construction activities. These are addressed in Section 3.19 entitled *Construction Period Impacts*.

Proposed Mitigation

DPW's goal during facility design will be to meet the residential noise criteria. This will be accomplished with a combination of design approaches including providing adequate distance or setback of the facility from residences and DVA, strategic location of noise-generating equipment, and other measures as determined to be appropriate.

3.6. NEIGHBORHOODS/HOUSING

The following discussion of neighborhoods and housing includes consideration of local socio-economic conditions, existing neighborhoods, and housing or residential character. Local

socio-economic conditions documented include major employers, economic trends, employment levels, income, and poverty levels. Comparative information on neighborhoods, housing, and local socio-economic conditions was obtained from the U.S. Census 2000, *Rocky Hill 2001 Plan of Conservation and Development*, Rocky Hill planning and economic development offices, the Connecticut Economic Resources Center (CERC), and field observation.

Existing Setting

Local Socio-Economic Conditions

Economic trends were assessed in some depth in the *Rocky Hill 2001 Plan of Conservation and Development*. Overall, Rocky Hill has a diverse and vibrant economy. Businesses and industrial land uses comprised about 37 percent of the 1998 Grand List in Rocky Hill and the town has more local jobs than local workers. At the same time, 82 percent of Rocky Hill workers commute to jobs in other communities, with 29 percent of those commuters working in Hartford. Future economic growth is expected to continue to reflect existing conditions, as the town is very inter-connected with the surrounding region. The economic development policy expressed in the *Rocky Hill 2001 Plan of Conservation and Development* calls for enhancing existing business sites and recruiting new businesses for appropriate sites.

Major Employers, Jobs, And Economic Trends**:** Table 6 presents an economic profile for the Town of Rocky Hill.

Table 6: 2001 Economic Profile for the Town of Rocky Hill

	Town of Rocky Hill
Jobs	14,117
Employers	1,034
Business (Firms) by Sector	
Agriculture	2.6%
Construction/Mining	14.1%
Manufacturing	4.2%
Transportation and Utilities	2.4%
Trade	20.7%
Finance, Insurance, and Real Estate	11.2%
Services	43.0%
Government	1.7%

Source: CERC Town Profiles, 2004

As shown, the services sector represents the largest employer/supplier of jobs in Rocky Hill. As defined in the 1987 *Standard Industrial Classification (SIC) Manual*, the services sector includes any establishment primarily engaged in rendering a wide variety of services to individuals, business, government establishments, and other organizations. The services category includes legal services, accounting services, and schools, as well as restaurants and repair and maintenance services. DVA is the largest service-oriented entity and one of the five largest employers in Rocky Hill (Connecticut Economic Resource Center [CERC], 2002).

Employment: As shown in Table 7, the study area has higher median incomes and a smaller percentage of unemployed workers and people living below the poverty level than other comparison groups. The low levels of vacant housing units and unemployment suggest that Rocky Hill provides both ample employment and housing opportunities.

Table 7 : Comparison of Census 2000 Employment and Income Data

	Study Area (Affected Census Blocks)	Town of Rocky Hill	Hartford County	State of CT
Income/Poverty				
Median Household Income	$56,595	$60,247	$50,756	$53,935
Percent Below Poverty	0.4%	2.7%	9.0%	7.9%
Employment Status				
Population	2,936	17,966	857,183	3,405,565
Of Employment Age	2,411	14,734	668,892	2,652,316
Employed	1,249	9,665	410,771	1,664,440
Percent Unemployed	2.2%	2.5%	6.6%	3.5%
Not in Labor Force	1,134	4,826	230,695	886,997

Source: U.S. Census 2000

Residential Character

Residential character in the vicinity of the Proposed Action site can be understood from an overview of neighborhoods, housing types, and household demographics in the context of the Town of Rocky Hill as a whole and the surrounding region.

Neighborhoods: Neighborhoods can be defined both by formal designation, or presence of an organized/formal neighborhood organization, and/or by residents' less tangible sense of community cohesion, or the sense of unification, "belonging", or closeness of a neighborhood or community. The site for the Proposed Action is abutted by a residential neighborhood to the north and the DVA facility to the east which provides long-term residential care. The Rocky Hill Planning Office reports there are no formal neighborhood associations or neighborhood planning initiatives in Rocky Hill. However, they note that the neighborhoods to the north of the site for the Proposed Action are generally cohesive and well established. There is a trend for the scattered large available residential parcels within these neighborhoods to be developed as new "active adult" complexes (meaning 55 and older with no children).

Housing Characteristics: The Town of Rocky Hill is predominantly residential and serves as a bedroom suburb for the Hartford metropolitan area. About 65 percent of the town is zoned for residential purposes. In the vicinity of the study area, the housing stock is quite diverse. As noted previously, adjacent and north of the Proposed Action there is new housing construction consisting primarily of senior living or active adult communities. These housing units are being constructed as in-fill residential development within or directly adjacent to already

established single-family neighborhoods. Within the study area, the percentage of vacant housing units is quite low (1.6 percent). Neighborhoods located to the east of the study area consist mainly of moderate density condominiums and high-density apartment complexes.

Household Demographics: Data on household demographics are most readily available from the 2000 U.S. Census. The study area falls within parts of Census Tract 4903.01 (Block Groups 2 and 4) and Census Tract 4902 (Block Group 9). Table 8 presents a comparison of Census 2000 demographic data for the study area (affected Block Groups), the Town of Rocky Hill, Hartford County, and the State of Connecticut.

Table 8: Comparison of Census 2000 Demographic Data

	Study Area (Affected Census Blocks)	Town of Rocky Hill	Hartford County	State of CT
Population	2,936	17,966	857,183	3,405,565
Males	1,676	8,875	412,276	1,649,319
Females	1,260	9,091	444,907	1,756,246
Median Age	47	41	38	38
Percent Elderly (65+ Years)	21.0%	16.5%	14.7%	13.8%
Percent Below Poverty	0.4%	2.7%	9.0%	7.9%
Percent Minority	9.2%	9.8%	23.0%	22.5%

Source: U.S. Census 2000

As shown in Table 8, the study area has a comparatively high percentage of elderly persons (age 65 years or over). As documented in the *Rocky Hill 2001 Plan of Conservation and Development*, population growth in Rocky Hill has slowed due to smaller household sizes and the aging of the population. Conversely, the study area has a comparatively low percentage of minority population when compared to Hartford County or the State of Connecticut as a whole.

Direct and Indirect Impacts

Local Socio-Economic Conditions

Impacts to local socio-economic conditions were assessed in terms of changes in employment and demand for local goods and services. The No-Action Alternative will constitute continuance of existing conditions and, as such, will have no direct or indirect impacts to local socio-economic conditions.

The Proposed Action will not displace any businesses or jobs but will relocate approximately 110 jobs to the Town of Rocky Hill. These are expected to be the same staff currently working at the existing SPHL in Hartford. There will, therefore, be a small gain in total jobs in Rocky Hill and a small loss for the City of Hartford. The effect of the relocated jobs will be negligible in terms of local unemployment. The Proposed Action may provide a small

beneficial impact to the Town of Rocky Hill in terms of expenditures by the new workers for local goods and services. The impact of the Proposed Action on income and employment will therefore be neutral or somewhat beneficial overall.

Neighborhoods

Impacts to neighborhoods were assessed in terms of disruptions to convenient access within the neighborhood (for vehicles as well as pedestrians or bicyclists), introduction of physical barriers to resident interaction within a neighborhood, loss of community institutions, and loss of structures important to the cohesive architectural or historical fabric of the neighborhood. The No-Action Alternative will constitute continuance of existing conditions and, as such, will have no direct or indirect impacts on neighborhoods.

The sole access to the Proposed Action will be from West Street and no substantial change to traffic patterns on the street is anticipated. Consequently, this will have no adverse effect on convenient access by residents to their homes. No community institutions or important local structures will be altered or displaced by the Proposed Action. It is notable, though, that the existing open space afforded by the site for the Proposed Action contributes to the quiet, suburban character of the subdivisions in the immediate area. This will be altered somewhat by the construction of a new SPHL on this site. The neighborhood is expected to experience some noise and change to visual setting as the property is developed. This is discussed in more detail in *Sections 3.5 Noise* and *3.15 Aesthetic/Visual Effects* of this document. Overall, the Proposed Action will have a minor adverse indirect impact to neighborhoods in the study area.

Housing

The No-Action Alternative will constitute continuance of existing conditions and, as such, will have no direct or indirect impacts on neighborhoods.

The Proposed Action will not displace or cause the loss of any housing units. It will have no direct or indirect effect on the mix of existing housing in the surrounding neighborhoods. Consequently, the Proposed Action will have no adverse direct or indirect impact on housing in the study area.

Proposed Mitigation

In order to offset the loss of natural surroundings, the project design team will maintain a natural vegetative buffer at the northern and western perimeters of the site. This buffer of vegetation will offset potential impacts on the quiet atmosphere that characterizes the residential neighborhood to the north and on visitors to the Rose Hill cemetery. The project team will also provide landscaping as needed and will maintain the trees along the eastern border of the site to preserve the visual setting and quiet campus-like qualities of the DVA facility.

3.7. WATER QUALITY

Existing Setting

Surface Water

There is one small unnamed stream within the study area (See Figure 5). This stream is located at the southwest corner of the property and flows from northwest to southeast, where it is piped under West Street and joins Hog Brook. Emerging from the red maple swamp in the southwest corner of the study area, this stream is a class "A" watercourse according to DEP's *GIS Water Quality Standards and Criteria* database (DEP, 2003). The "A" classification meets the highest standard of water quality and has the following potential uses: drinking water; fish and wildlife habitat; recreational use; agricultural or industrial supply; and other legitimate uses including navigation.

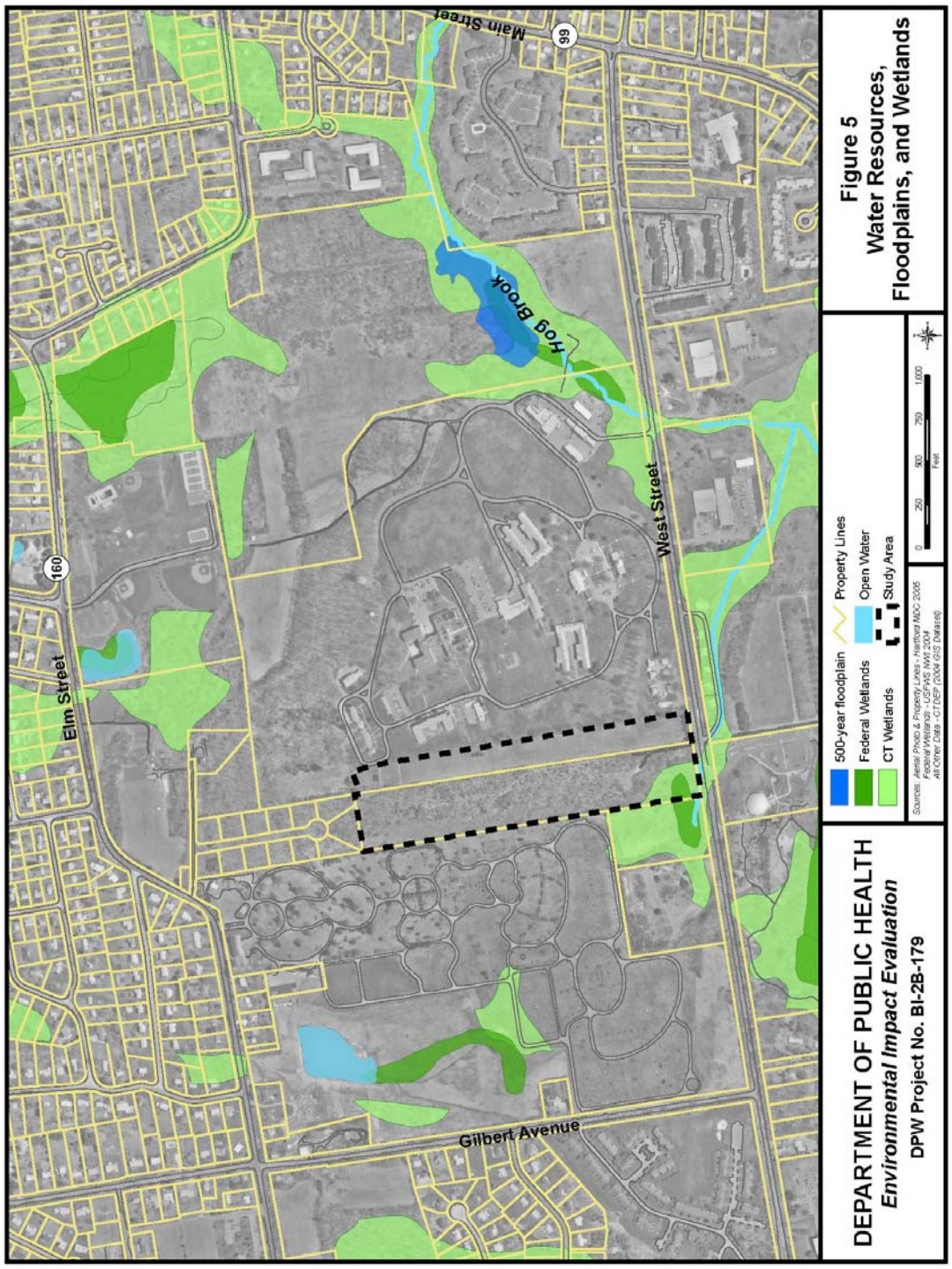
Groundwater

Groundwater quality in the area of the Proposed Action and surrounding vicinity is classified as "GA" (DEP, 2003). Groundwater classified as "GA" meets the highest groundwater standards and has the following potential uses: existing private and potential public water supply; and base flow for hydraulically-connected surface waters.

Direct and Indirect Impacts

The No-Action Alternative would result in no direct or indirect impacts on surface or groundwater resources.

Figure 5 - Water Resources, Floodplains, and Wetlands



Surface Water and Stormwater

Whenever a vegetated site is developed and impervious surfaces are introduced, adjacent surface waters are at risk due to potential degradation by polluted stormwater. The Proposed Action will result in the creation of approximately six acres of impervious surface based on the conceptual design of the building, access drive, and parking lot. The roadway and parking surfaces are accumulation areas for contaminants associated with motor vehicle operations such as fuel and oil leaks, brake and tire dust, and other potentially toxic materials. During storm events, these contaminants can be conveyed via sheet flow or piped drainage systems to their discharge points. The hard asphalt surfaces convey flows faster than soils and vegetation, thereby potentially resulting in faster-moving, more erosive runoff velocities of stormwater flowing from the site. Additionally, during summer months, runoff from hot asphalt surfaces can result in potential thermal impacts to receiving waters in the immediate vicinity of the outfall.

To account for these potential effects, a stormwater pollution control plan will be designed and implemented in accordance with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control* (DEP, 2002) to prevent and minimize sedimentation, siltation, and/or pollution of watercourses and wetlands. Additionally, project engineers will be required to consult the *Connecticut Stormwater Quality Manual* (DEP, 2004) to ensure that post-construction stormwater runoff is appropriately treated prior to discharge from the site. Treatment will most likely include, where appropriate, vegetated stormwater quality renovation basins, oil water separators, and/or hydrodynamic separators among other contemporary water quality renovation measures. The system will convey stormwater runoff to the municipal stormwater drainage system which pipes discharges into the Hog Brook watershed. These measures will prevent contaminated runoff from entering the stream and wetland on site. Runoff from the graded lawn areas will travel via overland flow to the south-southwest corner of the site and thereby into the wetlands and unnamed tributary to Hog Brook. This runoff will be relatively free of contaminants and will pass through existing vegetated buffers, which will provide for filtration and purification of runoff. As such, after construction, the Proposed Action will result in negligible impacts on water quality.

The highest risk of water quality degradation will occur during construction, when soils are exposed during excavation and grading operations, prior to site stabilization.

Groundwater

Adverse impacts on groundwater can occur when contaminants, either on the surface or within the soil, infiltrate the groundwater table. The proposed piped stormwater management system will collect contaminated runoff and convey it off-site. The handling and storage of hazardous materials on site will be highly controlled and regulated, such that there will be minimal groundwater contamination risk from spills. No infiltration of contaminants is expected to result from the Proposed Action, either during or after construction.

Proposed Mitigation

To account for potential effects on water quality, the design of the Proposed Action will include stormwater BMPs that will be fully coordinated with DEP. No other mitigation is warranted or proposed. Measures to address construction period impacts are discussed in Section 3.19 of this EIE.

3.8. HYDROLOGY AND FLOODPLAINS

Existing Setting

Floodplains

According to the *Flood Insurance Study (FIS)* and the *Flood Insurance Rate Map (FIRM), for the Town of Rocky Hill, Connecticut, Hartford County* (Federal Emergency Management Administration [FEMA], August 1, 1980), there are no designated FEMA floodways or 100-year floodplains on or within the vicinity of the site. Nearby areas of 500-year floodplains are shown on Figure 5.

Stream Channel Encroachment Lines

There are no Stream Channel Encroachment Lines (SCELs) in the vicinity of the Proposed Action site.

Direct and Indirect Impacts

The No-Action Alternative, which involves the continued operation of the SPHL at its present site in Hartford, would result in no construction and no direct or indirect impacts on floodways or 100-year floodplain resources.

Since there are no floodways, 100-year floodplains, or SCELs within the study area, there are no adverse impacts on these resources from the Proposed Action.

Proposed Mitigation

Since there will be no adverse impacts to floodways, 100-year floodplains, or SCELs, no mitigation is proposed. However, because the project is a State action, the project will require flood/stormwater management certification pursuant to section 25-68d of the CGS, regardless of its location relative to the floodplain. In addition, a general permit for stormwater discharge during construction will be required, as more than one acre will be disturbed.

3.9. WETLANDS

Existing Setting

Wetlands in the vicinity of the Proposed Action were determined through mapped data sources and are portrayed in Figure 5. The figure shows areas classified as state wetlands based on the Connecticut soils-based definition (DEP 2004 GIS Dataset), as well as areas encompassed by the federal three-parameter (soil, hydrology, and vegetation) wetlands definition (USFWS NWI 2004). In most cases, federal wetlands also qualify as state-regulated wetlands.

Figure 5 shows the presence of a pocket of state and federal wetlands on the north side of West Street, in the southwest corner of the Proposed Action site. The pocket consists of an oval-shaped federal wetland surrounded by state wetlands and is associated with the headwaters of an unnamed tributary to Hog Brook. Based on field observations, the wetland pocket consists of a relatively undisturbed forested (red maple swamp) wetland system. The wetland's low position in the landscape indicates it receives runoff from a forested slope to the north on the Proposed Action site, and from small portions of a single residential property to the west, the cemetery to the northwest, and the DVA site to the northeast. Wetland functions include sediment/nutrient retention and limited wildlife habitat.

Direct and Indirect Impacts

Under the No-Action Alternative, there would be no impacts on wetlands.

As proposed, the new SPHL building will be located on the interior, elevated portion of the parcel, resulting in almost total avoidance of direct wetland impacts. However, the access drive from West Street and the facility's parking lot, which is to be located on the south side of the building, could require filling approximately 0.05 acres of wetlands. The impacted wetland appears to qualify as both a state and federal wetland. However, the exact amount of direct impact and whether the wetland qualifies as a state or federal wetland, or both, can not be determined until wetland field-delineation is completed. Field delineation will be coordinated with project design and will guide further wetland-avoidance and impact-minimization measures.

Other potential permanent impacts on wetlands include diminished wildlife habitat value due to the development of surrounding woodlands, upon which many wetland species depend. In addition, the Proposed Action intends to collect runoff from the developed surfaces and convey it directly into the municipal stormwater treatment system. This may deprive the

wetland of important surface water inputs from those surfaces. The reduction in water inputs could result in a change in the overall water regime of the wetland, which could result in a gradual reduction in the size of the wetland or a gradual change in wetland type from red maple swamp to scrub-shrub. Temporary impacts could include sedimentation from construction, with the potential of creating a platform for non-native invasive plants to proliferate.

Proposed Mitigation

Stormwater management and landscaping will be the primary mitigation measures for the very minor permanent wetland impacts that may be anticipated. Temporary erosion and sedimentation controls during construction and the permanent stormwater management system will be designed to maximize collection and stabilization of loose soils. Potentially contaminated runoff from paved areas will be collected and removed via the municipal stormwater drainage system as described in Section 3.7 *Water Quality*. A landscaped buffer will be established around the parking lots and other paved areas where soils have been disturbed, emphasizing native and non-invasive plantings with high wildlife habitat value.

3.10. FLORA/FAUNA/HABITATS/THREATENED AND ENDANGERED SPECIES

Existing Setting

Wildlife Habitat

The site of the Proposed Action is approximately 500 feet wide and 1,800 feet long. The site consists of a wooded area in the western half and a lawn in the east, sharply divided by a chain link fence. The wooded area is characterized by a solid stand of consistently aged semi-mature red maples (*Acer rubrum*) and grey birches (*Betula populifolia*) with stem sizes averaging between 8 and 16 inches in diameter at breast height. The lawn area is meticulously manicured and contains several small undulating hills. The southwestern corner of the site is a red maple swamp, comprised of red maples and skunk cabbages (*Symplocarpus foetidus*). The proposed site is bordered by the Veterans' Home on the east, West Street on the south, Rose Hill Cemetery on the west, and a newly developed residential neighborhood on the north.

Although the site contains many favorable elements for diverse wildlife habitat, there are several factors that restrict its value. The fence eliminates use of the "edge" habitat between woods and lawn, and the adjacent manicured settings of the VA Home and cemetery offer minimal habitat structure to support wildlife. The surrounding office and residential uses have fragmented habitat and increased human-animal interactions, reducing the seclusion desired by many wildlife species.

The wooded portion of the site may provide full habitat needs for a small number of birds and small mammals and may serve as a temporary refuge for wide-ranging wildlife. It offers good habitat for edge species of birds. During a field visit, wild turkey and songbirds were

observed in the wooded area, and groundhogs were observed in the lawn area. Other potential wildlife species that may occur at the site include transient coyotes, white-tailed deer, rabbits, gray squirrels, and various rodents.

Ecologically Sensitive Areas/Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) and the DEP Natural Diversity Database (NDDB) were consulted to determine if any state or federal threatened, endangered or special concern species or critical habitats are known to occur on the site. Correspondence dated June 27, 2005 from the USFWS states that "no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the USFWS are known to occur in the project area, and that preparation of a Biological Assessment or further consultation with (the USFWS) under Section 7 of the Endangered Species Act is not required".

The review of DEP's NDDB revealed that there are no records of extant populations of federally listed threatened or endangered species, or species listed by the state as threatened, endangered or of special concern in the project area. DEP's response to the Notice of Scoping for the Proposed Action (see correspondence dated June 22, 2005 in Appendix A) repeated this finding. The site provides no apparent unique or special habitat values, indicating extremely low potential for threatened or endangered species or their habitat.

Direct and Indirect Impacts

The No-Action Alternative would result in no construction and no direct or indirect impacts on the proposed site.

The Proposed Action is anticipated to have minimal impacts on wildlife habitat and wildlife species. Although tree removal and land grading will be required, the only resident wildlife species anticipated to be disturbed are edge-loving song birds and small mammals. These are wildlife species that are abundant in Connecticut's mosaic of land uses and vegetative cover, such that local and regional wildlife diversity will not be substantially affected.

The Proposed Action will not result in any direct or indirect impacts on federal or state-listed threatened, endangered or special concern species.

Proposed Mitigation

Since no significant adverse impacts on wildlife, ecologically sensitive habitats, or rare species are anticipated, no mitigation is required or proposed.

3.11. SOILS AND GEOLOGY

Existing Setting

According to DEP geological data (DEP GIS 2004), the Proposed Action is situated on top of deposits of thin glacial till underlain by reddish-brown silty shale. The *Soil Survey of Hartford County* (U.S. Department of Agriculture Soil Conservation Service, 1962) shows soils in the project vicinity as Udorthents, Wethersfield Loams, and Wilbraham Silt Loams. Udorthents consist of well drained to moderately well drained soils that have been altered by cutting, filling, or grading. Such areas either have had two feet or more of the upper part of the original soil removed or have more than two feet of fill material on top of the original soil. The Wethersfield series consists of very deep well drained loamy soils formed in dense glacial till on uplands. The soils are moderately deep to dense basal till. They are nearly level to steep soils on till plains, low ridges, and drumlins. Permeability is moderately rapid or moderate in the column and slow or very slow in the dense substratum. The Wilbraham series consists of poorly drained loamy soils formed in subglacial till. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level to gently sloping soils in drainage ways and low-lying positions of till hills. Slope ranges from 0 to 8 percent. Permeability is moderate in the surface layer and subsoil and slow or very slow in the dense substratum.

Udorthents are not farmland soils. Wethersfield and Wilbraham soils, which comprise approximately 95 percent of the study area, are designated as prime or other important farmland soils. However, no farm uses occur on or adjacent to the site, the site is not locally zoned for agricultural use, and has not been identified by either the Town of Rocky Hill or the State of Connecticut as a desired site for agricultural use. Wilbraham silt loam is also a regulated state wetland soil, occurring in the location of the unnamed tributary to Hog Brook.

Direct and Indirect Impacts

The No-Action Alternative would result in no construction and no direct or indirect impacts on the proposed site.

Due to the fact that there is some elevation change within the Proposed Action site and the depth to bedrock is very shallow, there may be a need for blasting and clearing of excess materials. Additionally there will be a need to grade the land in order to situate the proposed building. Blasting and grading will have a direct and permanent effect on the existing soil profile and geology.

All of the activities involved with the preparation of the site and construction of the facilities and associated parking lot will occur on soils that are prime farmland soils or soils of additional statewide importance. The Proposed Action will thus directly impact approximately seven acres of such soils, although no farm uses or operations will be affected.

Proposed Mitigation

Since no significant adverse impacts on soils or geology are anticipated, no mitigation is required or proposed.

3.12. CULTURAL RESOURCES

Existing Setting

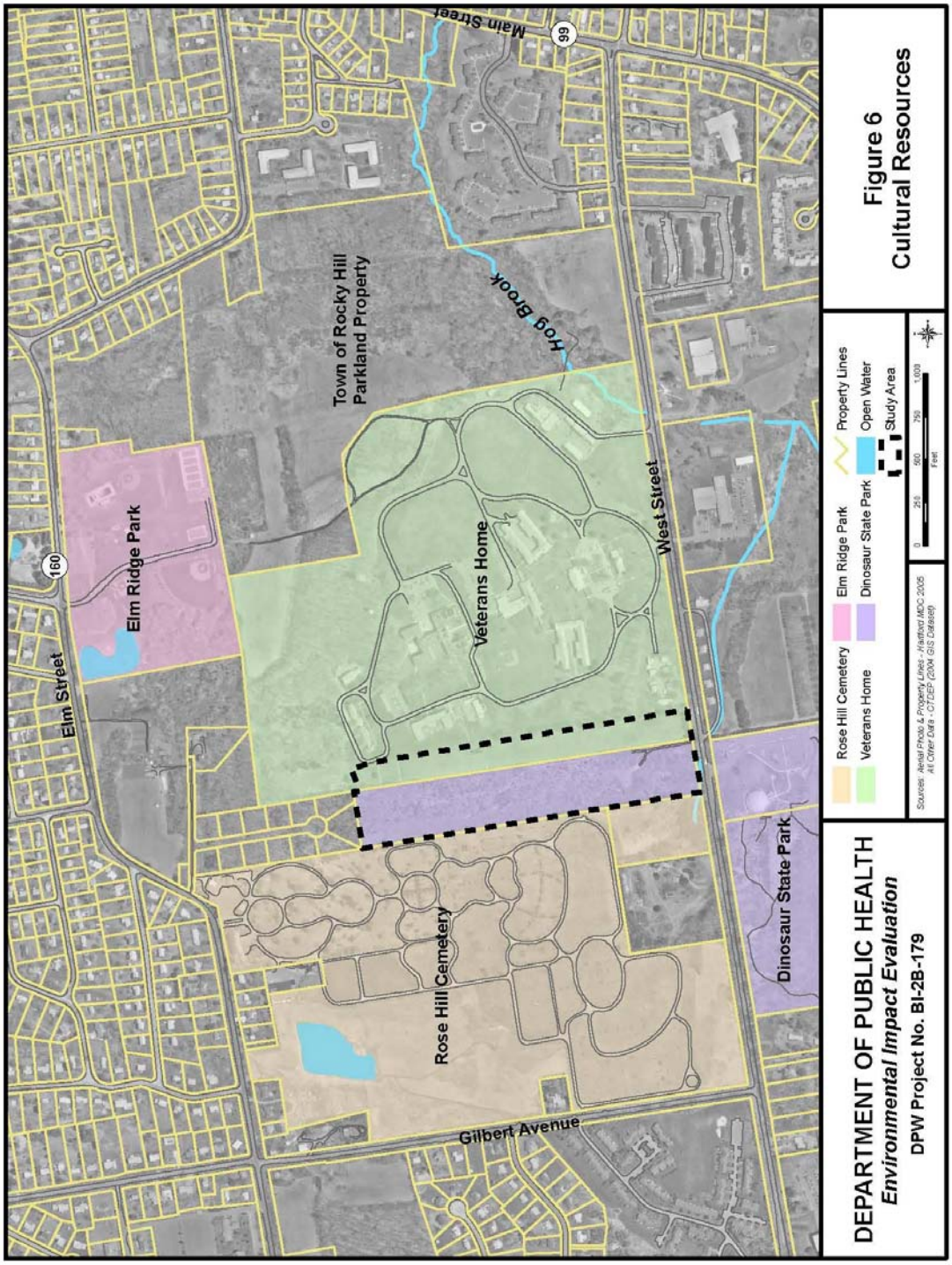
Archival research of files located at the State Historic Preservation Office (SHPO) was completed to identify all properties listed or eligible for listing on the National Register of Historic Places (NRHP) that are located within a one-quarter mile radius of the Proposed Action. This one-quarter mile radius is known as the Area of Potential Effect (APE). The APE is defined as the geographical area in which the Proposed Action may directly or indirectly cause changes in the character or use of cultural resources. A windshield survey was conducted on April 26, 2005 to verify the presence of historic structures identified by the research and to assess potential impacts on the visual setting of historic properties from the Proposed Action. Historic properties and districts determined to exist within the APE are shown in Figure 6 and Table 9. Agency coordination with the SHPO was initiated for this EIE in May, 2005 (see Appendix A) and is ongoing.

Table 9: Above Ground Cultural Resources

Resource	Description
Dinosaur State Park (main campus on south side of West Street)	Dinosaur State Park is owned by the Department of Environmental Protection. It is one of the largest dinosaur track sites in North America and has been designated as a Natural Landmark by the National Park Service.
Rose Hill Cemetery	This picturesque "garden" cemetery is comprised mostly of graves dating from after 1950.
DVA campus	The Department of Veterans' Affairs campus at 287 West Street, Rocky Hill was established at this site in 1940. Portions of the Veterans' Affairs site are over fifty years of age. The site is listed on the State Register.

Source: Compiled by FHI

Figure 6: Cultural Resources



The proximity of the Proposed Action to Dinosaur State Park and the possibility of paleontological resources is the most obvious concern. Louis Berger Group, Inc. completed a Phase IA archeological survey, including hand auger tests of the area, on May 23, 2005. The assessment survey and soils investigation concluded that the study area has a moderate potential to possess prehistoric archeological deposits. The soils investigation concluded that undisturbed portions of the study area have the potential to contain prehistoric archeological resources.

Direct and Indirect Impacts

The No-Action Alternative would result in no ground disturbance and no direct or indirect impacts on the proposed site.

The construction of a new SPHL at the proposed site, given its narrow width, will likely have an adverse visual impact on the historic context of the DVA campus and on Rose Hill Cemetery. The Proposed Action may also impact potential prehistoric archeological resources.

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Proposed Mitigation

Mitigation measures to prevent or minimize impacts to the setting of existing historic resources include preservation of a vegetated buffer along the western edge of the property and maintaining the line of trees and providing additional landscaping along the eastern site boundary. Given the potential for prehistoric archeological resources, additional (Phase IB) testing is recommended prior to the start of construction. Coordination with the SHPO is ongoing.

3.13. SOLID WASTE AND HAZARDOUS MATERIALS

Existing Setting

Relevant information about the history of release of hazardous materials, the presence of underground storage tanks, and solid waste handling practices was obtained through a review of existing GIS database information, files maintained at DEP, the facilities plan, and conversations with DPH personnel. The review of existing GIS database information and DEP files revealed that there has been no known release of hazardous materials nor are there any underground storage tanks at the Proposed Action site. There is a potential area of environmental concern east of the site located on the adjacent DVA campus. The site is a former incinerator that is a Resource Conservation and Recovery Act facility.

The current SPHL facility handles a variety of hazardous materials, as well as solid waste. Operations for the analytic areas require some generation of hazardous materials on a daily

basis, which is handled under strict safety guidelines in accordance with local, state, and federal requirements. The proposed new Laboratory is expected to continue these practices.

Hazardous wastes generated by activities at the SPHL will include:

- Biomedical waste
- Bulk/building materials tested for the presence of asbestos
- Building material samples tested for the presence of lead
- Radioactive isotopes

Direct and Indirect Impacts

Under the No-Action Alternative the Laboratory would continue to use and generate hazardous materials and solid wastes at essentially the same rates and SPHL operations would essentially remain unchanged. Hazardous material and solid waste handling and disposal would continue according to current procedures.

The Proposed Action will generate both solid waste and hazardous materials at essentially the same rates as under current operating conditions for the existing facility. Storage, handling, and disposal of hazardous waste materials and solid wastes will continue according to established laboratory procedures in compliance with all state and federal requirements. Physical requirements to facilitate recycling and reduce solid waste will be considered in the design and layout of the Proposed Action. Pick-up of spent hazardous material will take place by a licensed hazardous waste hauler according to a regular schedule.

The new SPHL will also include new, updated facilities to handle disposal of hazardous waste materials requiring special treatment and storage such as modern exhaust scrubbers. An emergency management plan will be developed by DPH for the proposed facility. This plan will include detailed procedures for containment and clean-up of chemical spills, coordination with DEP and/or Town of Rocky Hill emergency management personnel, if called for, and protocols for handling other accidents.

Proposed Mitigation

Since no adverse impacts are anticipated, no mitigation is required.

3.14. USE/CREATION OF PESTICIDES, TOXINS OR HAZARDOUS MATERIALS

Existing Setting

The SPHL stores, analyzes, and disposes of a variety of toxic and hazardous materials as part of its day-to-day operations. This use is associated with the following activities:

- Testing clinical samples for inherited disorders and disease agents
- Testing of samples for rabies and other infectious agents
- Analyzing environmental samples for hazardous chemicals
- Testing for the presence of hydrocarbons and petroleum in drinking water
- Performing chemical analysis of potable and non-potable liquids
- Monitoring the presence of radioactive agents in the environment
- Monitoring the presence of asbestos and lead in building materials
- Sampling food and water for the presence of parasites and infectious pathogens
- Testing materials submitted by the FBI for potential hazardous agents

Items potentially containing small amounts of hazardous materials that are used at the Laboratory include the following:

- Batteries (e.g., for emergency lights and security systems)
- Sprinkler system contacts
- Fluorescent lamps including PCB ballasts
- Cathode ray tubes (e.g., computer monitors)
- Electronic equipment (e.g., circuit boards)
- Air conditioning equipment
- Gas regulators
- Thermostats and mercury thermometers

Direct and Indirect Impacts

Under the No-Action Alternative, the SPHL would remain in downtown Hartford amidst major employment centers and government buildings. This location presents some public safety concern due to the large population of the area, especially during working hours. The facility would continue to use hazardous materials at essentially the same rates as under current operating conditions. Hazardous materials handling would continue according to current procedures.

Under the Proposed Action, the use of toxic and hazardous materials will be managed in generally the same manner as at the existing SPHL. A free-standing (above or underground) storage tank may also be installed on-site to store fuel to power back-up generators. However, the Proposed Action will be a new, more modern SPHL facility on a secured location with enhanced analytic areas, storage facilities, staging, docking, and loading areas as well as new state-of-the-art equipment. As such, the Proposed Action can be expected to better facilitate and have a beneficial effect on management of toxic and hazardous materials.

A staging area will be provided at the proposed new facility for receiving and sorting deliveries. Test samples will be logged, numbered, and batched for transport to the analytic areas. Refrigeration will be provided as needed. For chemicals, the stock clerk in the receiving

room checks the manifest and packing slips against the delivery contents. Samples will be delivered daily by U.S. Postal Service, but may also arrive daily by courier. Delivery of large equipment and supplies to the loading dock will generally be completed by 3 P.M. daily.

Specialty gases (argon, nitrogen, etc.) will likely be delivered once per week, on a regularly scheduled day and time. Most gases are non-flammable. When the facility is closed, an overnight depository will be available. Some samples are considered public health emergencies and will be accepted 24 hours per day, seven days per week. Suspected agents of terrorism will also be accepted from law enforcement at any time by on-call DPH staff personnel at the facility.

An emergency management plan will be developed by DPH for the proposed facility that will include detailed procedures for containment and clean-up of chemical spills and handling of other accidents.

There will be no regularly scheduled application of pesticides to the grounds of the Proposed Action and no regular spraying for pest control indoors. Maintenance workers will conduct daily inspections of the facility, and, as part of this inspection, check for signs of rodents, insects, and other pests. Extermination and/or pesticide applications will be conducted as needed.

Proposed Mitigation

Since no adverse impacts are anticipated, no mitigation is required.

3.15. AESTHETIC/VISUAL EFFECTS

Existing Setting

The Proposed Action site is on a south-facing slope of a high hill. The site is a wooded rectangular strip between the adjacent park-like settings of the DVA campus to the east and Rose Hill Cemetery to the west. The site is visible from both DVA and the cemetery. The site provides a wooded landscape between these two properties. During the growing season, the leaves of the trees -- primarily red maples and grey birches -- create a relatively solid screen whereas after leaf-fall the trunks and branches create a filtered screen.

Direct and Indirect Impacts

Under the No-Action Alternative, there would be no impacts on visual quality or aesthetics.

The SPHL under the Proposed Action is anticipated to be a modern rectangular structure with two stories. It would be located on a side-slope just below the high point on the property at approximately the same elevation (finished floor elevation of 240 feet) as the existing DVA

hospital building. The construction of the Laboratory and parking lot would require the removal of several acres of trees that currently provide a wooded setting on the western side of the DVA campus, and the new facilities would be within several hundred feet of some of the historic DVA buildings.

The removal of screening vegetation and construction of the new facilities, including the possibility of constructing a water tower, would result in visual impacts on both the DVA campus and Rose Hill cemetery. A large boxy laboratory building would likely stand out from the more diminutive modular and segmented buildings of DVA, which are visually unified by materials, color, size/shape, and their arrangement around the circular service road. The SPHL would be visible from West Street, the DVA campus, and portions of the cemetery. It may be shielded from view of the residences to the north, for the most part, by the crown of the hillside behind it. Development of the Laboratory site would replace much of the rural forested buffer strip and could thus disrupt the park-like setting of the DVA property. It would be situated slightly higher than the cemetery and may thus be particularly visible to some cemetery visitors in winter. While modern buildings with parking lots have been developed in close proximity to the Proposed Action site, relatively nearby on the south side of West Street, the particular location of the Proposed Action, on a prominent hill and within a narrow forested strip, is difficult to shield entirely from adjacent uses.

Proposed Mitigation

DPW intends to design a new SPHL structure that incorporates an aesthetic exterior façade that is compatible with the nearby DVA buildings to the extent practical. The other primary mitigation measure available for visual impacts is landscaping. A landscaping plan will be developed to maximize visual screening from DVA and the cemetery where views of the new building and parking lot will be most obvious. The design team will be directed to use native, non-invasive species in developing the project's landscape plan, along with consulting with the Invasive Plant Council's published invasive list. The plan will attempt to create a visually attractive and interesting naturalistic setting in keeping with the park-like settings of both adjacent uses and with the broader native forested landscape. Utility lines will be placed underground to the extent feasible.

3.16. ENERGY USE AND CONSERVATION

Existing Setting

As previously noted, the existing Public Health Laboratory was erected in 1965, with a wing later added in 1980. The building has one of the highest energy demands of all the buildings owned by DPW, in part due to its age and poor condition. Energy used to heat, cool, light and operate the wide array of instrumentation and mechanical equipment housed in the existing building is primarily in the form of electricity and fossil fuels. Utilities providing energy

service to the existing facility include Connecticut Light & Power (CL&P), Connecticut Natural Gas (CNG), and the Hartford Steam Company.

The proposed Rocky Hill site is a vacant parcel under the control and care of DEP and DVA that presently has no associated energy use/consumption. Utilities providing energy service to nearby developed properties include CL&P via overhead transmission wires along West Street and CNG via underground gas mains.

Direct and Indirect Impacts

The Proposed Action includes the construction of a new state-of-the-art building on a new location in Rocky Hill. Although it will pose a locally increased energy demand in the Town of Rocky Hill, the building will be constructed in a much more energy-efficient manner than the existing facility. Today's designers are required to take into consideration various development site-wide energy saving measures and other Green Building strategies (also known as LEEDS [Leadership in Energy and Environmental Design]) in accordance with criteria set forth in the state-wide Connecticut State Building Code and its supplements. Green Building strategies that may be employed include efficient building arrangement/orientation, insulating materials, glazing methods, heat recovery systems, and various other energy efficiency measures. As the design evolves, LEEDS will be employed to a level and extent that the project budget allows and in conformance with any adopted state regulations, but the project may not necessarily receive LEEDS certification. DPW will encourage the use of energy conservation measures in the design process by engaging in a review protocol that will assess various building system alternatives using a Life Cycle Cost Analysis (LCCA). The LCCA will consider initial capital cost, fuel usage, fuel costs, and operating and maintenance costs among other parameters, resulting in various recommendations to DPH and project designers.

As far as energy availability, CL&P and CNG estimate that there will be adequate energy supply to meet the increased demand at the new Rocky Hill location.

Overall, the Proposed Action is viewed as being beneficial in terms of energy use/demand, as project architects and engineers will incorporate energy conservation measures into its overall design and operation. The inclusion of these measures will render the new SPHL very energy-efficient, such that it may require less energy than the current inefficient Laboratory, despite the increase in size.

Proposed Mitigation

The Proposed Action will replace an existing facility that has a high energy demand. In addition, it will be constructed to incorporate energy efficiency measures. Consequently it will not significantly impact on the infrastructure needs of energy providers. Therefore, no mitigation measures are warranted or proposed.

3.17. PUBLIC UTILITIES AND SERVICES

Existing Setting

The Proposed Action site is an undeveloped parcel of land under the control and care of DEP and DVA that is located north of West Street in Rocky Hill, opposite the main entrance to Dinosaur State Park. There are presently no direct utility connections to the parcel but potable water, sewer, storm sewer, natural gas, electrical, telecommunication and cable television service are available in the area and direct connections could be readily made to support development.

Potable Water

The Metropolitan District Commission (MDC) provides potable water distribution and sanitary sewage collection and disposal in the vicinity of the proposed site as part of its service to the Town of Rocky Hill. The MDC's water distribution system consists of upland impoundments in the Farmington River watershed totaling approximately 40 billion gallons. Water flows by gravity to two filtration plants with a capacity of over 70 million gallons. Here, approximately 55 million gallons are treated daily. Flows in the system are by gravity except for some pumping of treated water to higher elevations. All services are metered, and the population served directly is estimated to be 400,000.

The water distribution system in the vicinity of the site exists primarily to the north along Elm Street. There is no water main along West Street as it passes along the frontage of the parcel. MDC water service along West Street terminates to the east of the Veterans' Home and at Capital Boulevard.

The design for the water supply infrastructure to serve the Proposed Action is still being determined. It is anticipated, however, that the new water main loop being designed to serve the proposed expansion of the DVA facilities to the east will also have adequate capacity and extend to serve the new SPHL. This new water main loop will be fed from Elm Street and West Street. In order to guarantee uninterrupted water service to the Proposed Action, a water tower with up to a half-million gallon tank may be erected on the site to provide a back-up supply in the event it is needed. This back-up would also provide a water source for fire protection as there are no hydrants along West Street in close proximity to the facility.

Sanitary Sewer

The MDC's sewage collection system consists of over 1,200 miles of sanitary sewers serving member municipalities. Four water pollution control plants process and treat an average daily sewage flow of approximately 85 million gallons, with an average daily flow treatment capacity of approximately 100 million gallons. The four plants include a main facility in Hartford and three satellite water pollution control facilities including one in Rocky Hill.

Each of the satellite facilities provides full secondary treatment of the wastes it receives from its service area. However, these smaller plants do not have sludge processing capabilities. As a result, the sludge at the Rocky Hill plant is delivered to Hartford where it is processed and disposed of in a safe manner.

The sanitary sewer collection system in the vicinity of the proposed site is located on West Street and flows to the east to the sewage treatment plant located on Goff Brook Lane along the Connecticut River. Lateral service connections will be required in order for the proposed facility to tie into the existing sanitary sewer system, which has adequate capacity to accommodate this.

Stormwater Management

The separate stormwater collection system in the vicinity of the proposed site is located on West Street and is piped to the east where it discharges in the Hog Brook watershed. The stormwater drainage system to serve the Proposed Action will also be separate from the sanitary sewer system and will make a lateral connection from the site to the existing stormwater collection infrastructure, which has adequate capacity to accommodate this.

Energy Supply

A gas main owned by CNG is located within West Street. A lateral connection can be made to tie the facility into this gas main. Overhead CL&P power lines can be found along the north side of West Street in the project area. Electricity for the proposed Laboratory could easily be provided by a direct connection to these overhead lines.

Direct and Indirect Impacts

The No-Action Alternative would represent a continuance of existing conditions, meaning that the Laboratory would continue operations in downtown Hartford and the proposed site would remain undeveloped. Under the No-Action Alternative, the existing building at 10 Clinton Street would undergo essential repairs and upgrades where feasible. However, these system improvements are not anticipated to have any direct or indirect impacts on public utilities or services.

Potable Water

The Proposed Action will generate demand for potable water at generally the same rates as the current facility, with some limited growth in demand over time as Laboratory functions expand. All proposed modifications and/or connections to the existing water distribution system in Rocky Hill will require review and approval by MDC prior to construction.

Sanitary Sewer

The Proposed Action will generate sewer flows at generally the same rates as the current facility, with some limited increase over time as Laboratory functions expand. All proposed modifications and/or connections to the existing sanitary sewer system will require review and approval by MDC prior to construction.

Stormwater Management

The existing site is an undeveloped vegetated parcel of land with no impervious surfaces. The Proposed Action will involve the construction of a two-story building, a 240-space paved parking lot, and an access driveway. The final developed site would result in a net increase of approximately 6 acres of impervious surfaces comprised of asphalt parking areas and rooftops. Stormwater from this impervious area will be treated as noted in Section 3.7 *Water Quality* and then piped into the existing stormwater sewer system, which discharges east of the site into the Hog Brook watershed.

Energy Supply

CL&P and CNG estimate that there will be adequate energy supply to meet the increased demand at the new Rocky Hill location. Nonetheless, it is important to note that the proposed SPHL must have an uninterrupted power supply at all times. It is very likely that the ultimate design of the facility will include one or possibly two emergency generators of sufficient size to maintain power at the site in times of any grid/system outages.

Utility service impacts from the Proposed Action may be most noticeable during construction, as the potential exists for local consumers to experience temporary outages. These impacts are addressed in more detail in the Section 3.19, *Construction Period Impacts*.

Proposed Mitigation

All proposed connections to the existing storm sewer system will be subject to the review and approval of MDC, ConnDOT, and the Town of Rocky Hill prior to construction. DPW and DPH will coordinate as appropriate with DEP, MDC and the Town of Rocky Hill to ensure that stormwater runoff generated from the site is properly treated and handled before being discharged into the environment. Such treatment could include, where appropriate, vegetated stormwater quality renovation basins, oil water separators, and/or hydrodynamic separators among other contemporary water quality renovation measures.

3.18. PUBLIC HEALTH AND SAFETY

Existing Setting

One of the primary functions of the SPHL is to protect the public health. The existing SPHL has performed this function safely for the past 40 years, but is now a critically aging and

outdated facility. It is situated among other buildings in a heavily congested urban setting which is less than ideal from a public safety perspective.

The Proposed Action will improve the safety of the SPHL facility and enhance the State's capacity to respond to public health emergencies. The SPHL will proactively protect the surrounding community from potential hazards of its operations. It will fully comply with stringent federal and state regulatory requirements for safe design, construction, use, security, staff training, inspection and certification, and waste management. Biological Safety Cabinets will be used when working with the most infectious agents. These cabinets will be equipped with High Efficiency Particulate Air (HEPA) filters which remove bacteria and viruses from exhaust air. Laboratory waste will be sterilized or disposed of as regulated medical waste. Chemicals will be stored safely and disposed of in conformance with all federal and state regulations. Regularly scheduled waste pick-up will be done by certified hazardous waste contractors for off-site disposal. Staff will be trained to operate with safety and security protocols designed to prevent risk to themselves and the surrounding community. The secured site will include perimeter fencing, a controlled access point with a single point of access, and multiple levels of security devices throughout the facility to prevent unauthorized entry into restricted laboratory areas. Based on job function, employees will be subject to FBI background checks and security clearance. The facility will be equipped with standby power generators, a modern fire alarm and sprinkler system, and an appropriate ventilation system. The proposed new SPHL will contain state-of-the-art technologies and systems that will enhance management of toxic and hazardous materials and sustain Laboratory operations in the event of an emergency loss of power.

An emergency management plan will be developed by DPH for the SPHL. This plan will include details regarding evacuation routes, procedures for containment and clean-up of chemical spills, protocols for coordination with DEP and/or the Town of Rocky Hill, if called for, and the handling of other accidents. Rocky Hill police, fire, and ambulance personnel will be made aware of the emergency management plan so that response efforts can be fully coordinated. The police station, ambulance services, and all three of the fire stations in Rocky Hill are located less than two miles from the proposed Laboratory site.

Direct and Indirect Impacts

The No-Action Alternative would maintain the existing Laboratory at its current location. The existing structure and space configuration are not appropriate for state-of-the-art analytic areas and may, over time, constrain responses to emerging public health needs. Without repairs and upgrades, the existing Laboratory has inadequate ventilation, HVAC, and fire alarm systems to respond to emergency events within the building. Furthermore, the location is less than ideal from a public health and safety perspective due to the concentrated population of downtown Hartford. As such, the No-Action Alternative, over time, has the potential to have some adverse effect on public health and safety.

The Proposed Action involves construction of a new state-of-the-art SPHL utilizing modern technologies and systems. It will be centrally located in Connecticut for convenient statewide access and will be better equipped than the existing SPHL to address public health and safety needs. Additionally, the new facility will be on a secure, gated site with one access/egress point, thereby eliminating public safety and access issues that currently exist at the downtown Hartford location. Consequently, the Proposed Action may have a beneficial effect on public health and safety overall.

Proposed Mitigation

As no adverse impacts are anticipated relative to public health and safety, no mitigation is warranted or proposed.

3.19. CONSTRUCTION PERIOD IMPACTS

Impacts during construction of the Proposed Action are anticipated in relation to air quality, water quality/wetlands, noise, economy, solid waste, hazardous materials, and public utilities and services. The nature of these impacts and proposed mitigation measures for adverse impacts are described below.

Air Quality

During land clearing and construction of the proposed facility, potential air quality impacts may include airborne dust particles from exposed soils and emissions from idling and mobile construction vehicles. Potential construction air quality impacts can also arise from prolonged use of diesel-powered construction vehicles. Typical diesel exhaust emissions include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter ($PM_{2.5}$). Concerns over diesel exhaust emissions have led EPA to develop new emission standards for new diesel-powered vehicles beginning in 2004. However, since these standards did not begin to take effect until 2004 on new vehicles, EPA has developed the Voluntary Diesel Retrofit Program to help address pollution from diesel construction equipment and heavy-duty vehicles that are currently on the road today (EPA, 2003). Source citation? Retrofit Emission Control Devices, such as diesel oxidation catalysts, offer an inexpensive solution to reducing diesel emission impacts.

Mitigation: Contract specifications for the project will require the following DPW diesel exhaust emissions reduction measures, which will mitigate air quality impacts during the construction period.

- All diesel-powered non-road construction equipment with engine horsepower ratings of 60 and above, that are on the project or are assigned to the contract for a period in excess of 30 consecutive calendar days, will be retrofitted with emission control devices (oxidation catalysts, or similar retrofit equipment control technology).

- All motor vehicles and/or construction equipment (both on-highway and non-road) will comply with all pertinent state and federal regulations relative to exhaust emission controls and safety.
- Idling of delivery and/or dump trucks or other diesel-powered equipment will be limited to three (3) minutes during non-active use in accordance with RCSA, Section 22a-174- 18(b)(3)(C).
- All work will be conducted to ensure that no harmful effects are caused to adjacent sensitive receptor sites (including schools and residential structures).
- Diesel-powered engines will be located away from fresh air intakes, air conditioners, and windows.
- Work will be conducted to minimize exposed erodible earth area to the extent possible. This will include covering, shielding, or stabilizing stockpiled material as necessary. Exposed earth will be stabilized with grass, pavement, or other cover as early as possible. This may also include applying stabilizing agents (i.e., calcium chloride, water) to the work areas and haul roads.
- Work will be conducted using covered haul trucks.
- Work will be conducted to minimize the incidental transport of soil by construction equipment from unpaved to paved surfaces by rinsing of construction equipment with water or other equivalent method.

Water Quality/Wetlands

To mitigate potential water quality and/or wetland impacts during the construction period, temporary BMPs will be employed and an erosion and sedimentation control plan will be implemented, pursuant to regulatory guidelines and approvals. DEP's *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control* will be followed.

Noise

During the construction period, continuous as well as intermittent (or impulse) noise will be experienced in the immediate project vicinity, which may be perceived by some to be intrusive, annoying and discomforting. This noise will be generated by construction equipment including jack hammers, rock drills, and other pneumatic tools which emit strong penetrating percussive sounds, blasting operations, and the daily movement of dump trucks, loaders, backhoes, and other heavy equipment to, from, and on the construction site.

Table 10 provides typical noise emission levels in A-weighted decibels (dBA) 50 feet from construction equipment. For comparison, everyday noise levels within suburban environments similar to that found at the Rocky Hill site range from about 50 to 60 dBA (*Transit Noise and Vibration Impact Assessment*, DOT-T-95-16, April, 1995).

Table 10: Noise Emission Levels from Construction Equipment

Construction Equipment	*Noise Level (dBA) 50 feet from Source*
Air compressor	81
Backhoe	80
Dozer	85
Generator	81
Jackhammer	88
Loader	85
Pneumatic Tool	85
Rock Drill	98
Dump Truck	85

Source: *Transit Noise and Vibration Impact Assessment* (DOT-T-95-16, April, 1995)

In general, noise levels are reduced by 6 dBA for each doubling of distance from a noise source. Thus, a dump truck with a noise level of 85 dBA at 50 feet will have a noise level of 79 dBA at 100 feet, 73 dBA at 200 feet, 67 dBA at 400 feet, 61 dBA at 800 feet, and so forth. Buildings and other barriers located between a source and a receiver further reduce the intensity of construction noise. For comparison, the Proposed Action is located approximately 200 feet west of DVA and 200 feet east of the cemetery. It is also located approximately 800 feet south of the residential neighborhood to the north.

Mitigation: Numerous mitigation measures will be considered for implementation relative to noise, as follows:

- Erect temporary barriers around the work site where appropriate – these barriers could consist of earth berms and/or stockpiles of soils and fill materials
- Maintain a wooded buffer between the facility and surrounding land uses
- Install and maintain properly functioning muffler devices on all construction equipment
- Adhere to the Town of Rocky Hill noise regulations as set forth in Section 6.1.3 of the Town's Zoning Regulations
- Prior to production blasting, the licensed blast contractor will perform a test blast in an area where a relatively small amount of rock excavation is required and away from existing structures and foundations. The purpose of the test is to provide an opportunity for vibration monitoring and to confirm the licensed blast contractor's predicted vibration levels. This will also allow the contractor to adjust their plan accordingly if the measured vibrations exceed predicted levels. The licensed blast contractor will:
    - Monitor each blast's vibration to ensure compliance with the project's vibration criteria
    - Limit blasting primarily to the hours between 8:00 AM and 5:00 PM Monday through Friday

Economy

Economic activity will be stimulated by construction of the Proposed Action. One effect will be the production of jobs in on- and off-site construction, and trade, transportation, manufacturing, and services in support of construction. The earnings from these jobs will in turn generate personal expenditures by project-related workers that will stimulate the local and regional economy. Expenditures will also encompass materials used in construction. Overall there will be a beneficial construction period effect on the economy.

Mitigation: No mitigation is required.

Solid Waste and Hazardous Materials

Solid waste will be generated from construction (e.g., pallets, wood scraps, wallboard, siding and roofing scraps, packaging, dry latex paint residue, foam padding, insulation). This waste will be disposed of as municipal solid waste. Any construction waste materials containing solvents (e.g., paint thinner, varnishes) will be managed as hazardous waste and disposed of by a licensed waste hauler.

Mitigation: No mitigation is required.

Public Utilities and Services

During construction, the installation of utility lines has the potential to result in temporary short-term disruptions of local service. In addition, construction associated with underground utility installation has the potential to impact stormwater runoff quality as erosion of exposed soils may lead to sediment transport and potential increases in the turbidity of receiving waters.

Mitigation: The following measures will be taken during construction to mitigate impacts to utility services:

- Proactive coordination with utility providers will be undertaken prior to construction to ensure full coordination on new service connections and minimize utility service disruptions
- If lengthy service disruptions are anticipated, potentially affected consumers will be notified prior to the commencement of the construction activity
- For stormwater management, BMPs will be employed as described above. Erosion and sedimentation controls such as silt fences and hay bales will be installed at appropriate locations, such as at the base of fill slopes or around catch basin drop inlets, and will be regularly maintained and routinely checked after rainfall events

Energy Use and Conservation

Project construction will result in an increased local demand for fossil fuels (mainly diesel fuel) and an increased demand for electricity.

Mitigation: No mitigation is required.

3.20. CUMULATIVE IMPACTS

Cumulative impacts are the total incremental effects on a resource, ecosystem, or human community due to past, present, and reasonably foreseeable future activities undertaken by the sponsoring agency. In assessing what may happen in the future, reasonably foreseeable activities are actions estimated to be probable, based on observed trends and known programmed future projects, rather than simply possible, based on speculation.

The Proposed Action in association with other local in-fill development will contribute to cumulative effects on the community in terms of traffic, the local economy, and solid waste. The Proposed Action will have no significant cumulative effects on a region-wide basis. The affected region is considered to include all of the communities in the Capitol Planning Region that encompasses north central Connecticut. The Proposed Action will involve the relocation of the Laboratory from one Capitol Region community to another. Consequently, any region-wide cumulative effect would be minimal and would arise not from the relocation, but only from the gradual expansion in Laboratory operations over time which is made feasible with the Proposed Action but not with the No-Action Alternative.

The potential impacts of the expansion in Laboratory operations as a distinct element of the Proposed Action would be negligible. Growth in Laboratory operations will not require any additional acquisition of land. It is also not anticipated to require new additions to the facility or expansion of parking, but will be accommodated within the facility as proposed. It will result in limited additions to Laboratory staff. As there are no significant adverse impacts anticipated with the operations of the Proposed Action, the limited expansion for new analytic functions is also not expected to result in any cumulative adverse impacts.

Incremental increases in local traffic over time, combined with the net increase in site-generated traffic, are expected to slightly degrade traffic operations at certain study intersections if no improvements are undertaken. These impacts are anticipated to occur at certain study intersections within the local street network. The Proposed Action is not anticipated to have any adverse cumulative impacts on parking, transit service and operations, or pedestrian and bicycle facilities. There will be no cumulative effect on a regional basis due to the negligible change in traffic volumes generated by the Proposed Action in the context of region-wide traffic.

The Proposed Action in association with the in-fill development noted above can be anticipated to collectively increase the volume of solid waste generated in the Town of Rocky Hill over time. The incremental increase in the waste stream will develop only in small part from the Proposed Action. The

majority of the increased waste stream will result from the continued growth in residential development, business activity and associated goods and services seen in Rocky Hill and throughout the Capital Region.

4. UNAVOIDABLE ADVERSE IMPACTS

The unavoidable adverse impacts from the Proposed Action tend to be those that accompany almost any development that utilizes new land, no matter how consistent with the surrounding community character. In the case of the Proposed Action, there will be utilization of new land and also a shift of an existing operation to a new location. Therefore, the unavoidable adverse impacts to a large extent are displaced effects from Hartford to Rocky Hill and are anticipated to include:

- Loss of open space and/or natural areas, including loss of rural scenery
- Increase/change in stormwater flows
- Potential disturbance of archeological resources
- Noise generation
- Construction-related inconveniences

These effects go hand-in-hand with the use of land for human purposes. The use of the Rocky Hill site for the SPHL addresses the primary need of the project such that the project purpose and need would not be fulfilled without it.

The Proposed Action includes, where possible, mitigation measures to offset the anticipated impacts, to provide long-term resource conservation measures, and to protect the safety and quality of life in the site's surroundings. But it will not be possible to totally eradicate these effects. As reflected by the project purpose, the return expected is maximizing protection of public health in the State of Connecticut.

5. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable commitments of resources caused by the Proposed Action include:

- Energy - energy will be consumed in project construction
- Land - the land will be developed and the topography will be irretrievably altered. While it is possible that one day the site may be vacated and revert back to its natural state, that is not reasonably expected to occur in the foreseeable future. Consequently, use of the land is considered an irretrievable resource commitment for all practical purposes.
- Natural resources – site development will require some vegetated area be converted to buildings and pavement. Those areas of vegetation loss will not be replaced.
- Construction materials - a variety of natural, synthetic, and processed construction materials will be utilized to construct the Proposed Action.
- Human labor, and finances - the dedication of human labor to the construction and operational phases of the Proposed Action represents an irretrievable expenditure of time and production that is thus unavailable for other purposes. Finally, the expenditures required, once committed, are no longer available for other purposes and, once spent, cannot be regained.

6. SUMMARY OF MITIGATION MEASURES

The adverse impacts of the Proposed Action are limited and can all be mitigated. The following table summarizes the proposed mitigation measures for each impacted resource category. Where no mitigation is proposed, the impact evaluations have determined that adverse impacts are minor and do not warrant mitigation, that no adverse impacts were identified, or that anticipated impacts will be beneficial.

Table 11: Summary of Impacts and Proposed Mitigation

Resource	Impact Analysis	Mitigation
Land Use and Zoning	No adverse impacts	No mitigation required
Consistency with Local and Regional plans	Consistent with plans	No mitigation required
Consistency with SPOCD	Consistent with Neighborhood Conservation Area; conflicts with Open Space Preservation designation for parcel for Proposed Action	Compensation through Land and Water Conservation Fund process
Traffic and Parking	No adverse impacts	No mitigation required
Air Quality	Construction period impacts: Potential impacts from prolonged use of diesel powered vehicles. Typical diesel air quality emissions include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (PM2.5).	▪ Contractor bid specifications will utilize DPW's diesel emission reduction specifications ▪ Construction equipment will be required to comply with all pertinent state and federal regulations
Noise	Construction period impacts: Potential for continuous as well as intermittent (or impulse) noise to be experienced in the immediate project vicinity	▪ Erect temporary noise barriers around the work site ▪ Maintain a wooded buffer between the facility and surrounding land uses ▪ Install and maintain properly functioning muffler devices on all construction equipment ▪ Adhere to the Town of Rocky Hill noise regulations ▪ Perform a test blast for vibration monitoring and monitor blast vibrations to ensure compliance with vibration criteria ▪ Limit blasting to between 8:00 AM and 5:00 PM Monday through Friday
Neighborhoods and Housing	Minor adverse visual and character impact	Maintain buffer of native vegetation on three sides of the proposed site

Resource	Impact Analysis	Mitigation
Water Quality	Construction period impacts: Possible sedimentation of streams and wetlands due to construction	During construction, temporary BMPs will be employed and an erosion and sedimentation control plan will be implemented
Hydrology and Floodplains	No adverse impacts	No mitigation required
Wetlands	Construction period impacts: Possible sedimentation of streams and wetlands due to construction.	During construction, temporary BMPs will be employed and an erosion and sedimentation control plan will be implemented
Flora, Fauna, Threatened and Endangered Species	No adverse impacts	No mitigation required
Soils and Geology	Use of about seven acres of prime farmland soils; no active farm uses affected	No mitigation required
Cultural Resources	Adverse visual impact to the State Register listed DVA campus; potential for prehistoric archeological resources	Natural buffer screening maintained along the western edge of the DVA property; conduct a Phase IB survey and continued consultation with SHPO to determine mitigation measures for potential below-ground resources
Solid Waste and Hazardous Materials	Construction period impacts: Generation of construction waste material	Construction waste materials containing solvents will be handled by licensed waste hauler
Use/Creation of Hazardous Materials	No adverse impacts	No mitigation required
Aesthetics and Visual Effects	Adverse visual impacts to DVA campus and Rose Hill Cemetery	A landscaping plan with a natural buffer will be maintained or developed to provide visual screening
Energy Uses and Conservation	Beneficial impact due to energy conservation measures Construction period impacts: Increased local demand for fossil fuels and an increased demand for electricity during construction	No mitigation required
Public Utilities and Services	Potential for increased stormwater runoff due to increase in impervious surfaces Potential construction period impacts to stormwater flows and utility service	BMPs employed to ensure proper handling of stormwater runoff Proactive coordination with utility providers prior to construction to ensure full coordination on new service connections and minimize utility service disruptions
Public Health and Safety	No local adverse public health impacts; state-wide beneficial impacts	None

7. COST BENEFIT ANALYSIS

The analysis of costs and benefits for the Proposed Action includes the costs of construction and ongoing operations for the State Public Health Laboratory compared to the benefits derived from enhanced quality of life for all of Connecticut's residents. This cost-benefit analysis is based on the sum of findings of the impact analysis conducted for this EIE.

Costs

The Proposed Action will have direct construction costs (currently unknown as design is in the preliminary stages) and costs associated with day-to-day operations. Construction costs will include those incurred for both on-site and off-site activity including construction jobs, transportation, manufacturing, and services in support of construction.

As the Proposed Action will enable the Laboratory to acquire new technologies, there will be some costs associated with new equipment purchases over time that would not occur with the No-Action Alternative. Furthermore, as the SPHL expands its services somewhat over time, the cost of operations can be expected to rise while also being offset to some degree by increased revenue from clients. Other costs are more intangible, associated with the irretrievable commitment of existing open space and environmental resources in order to develop the site.

Benefits

Benefits of the Proposed Action will include enhanced long-term support of SPHL functions. The Laboratory will have improved capability to provide health, safety, and economic benefits to residents and businesses in the State of Connecticut. The Laboratory directly benefits the public health through all of its analytic programs such as newborn screening. It also offers indirect social benefits in terms of protecting child and worker health, prevention of potential widespread disease outbreaks, and improved health outcomes that help avoid the tremendous social and economic burdens of diseases and disabilities that would otherwise occur. In addition, the SPHL provides an economic benefit to the State. Most of the testing performed by the Public Health Laboratory is not available in the private sector or from any other source. Consequently, the Laboratory supports private health and environmental services and industries in Connecticut, which form an important component of the state's economy.

The Proposed Action will have a direct benefit locally with jobs created by the future expansion of Laboratory operations and expenditures by employees in the local economy. During construction, jobs at the site will generate earnings (wages and salaries). From

earnings flow personal expenditures which can inject the income earned by project-related workers into the local economy.

Finally, when the SPHL leaves Hartford, it will create an opportunity for infill development at the site of the existing Laboratory that may have the indirect benefit of contributing to the ongoing revitalization of the Downtown neighborhood.

Given that the Laboratory provides an essential service to the State of Connecticut in maintaining and enhancing public health and welfare, the benefits of the Proposed Action are deemed to justify the costs.

8. LIST OF CERTIFICATES, PERMITS AND APPROVALS

This section identifies potential permits, approvals, certifications and registrations that may be required for completion of the Proposed Action:

Federal

- U.S. Army Corps of Engineers Category 1 Connecticut Programmatic General Permit (Non-reporting/Minimal Impacts)

State

- DEP Miscellaneous Discharges of Sewer Compatible Wastewater
- DEP Wastewater Discharge
- DEP Section 401 Water Quality Certification
- DEP New Source Review (Air Emissions)
- DEP Inland Wetlands/Watercourse Permit
- DEP General Permit for Stormwater and Dewatering Wastewaters from Construction
- DEP Flood Management Certification (CGS, Section 25-68d)
- Connecticut State Historic Preservation Office (SHPO); ongoing consultation
- State Traffic Commission Certificate of Major Traffic Generator

Local

- Local utility connections

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